

Project Manual and Specifications

Polpis Harbor Maintenance Dredging Town of Nantucket, MA



Issued for Bid

October 9, 2018



15 Creek Road
Marion, MA 02738
Tel No. (508) 748-0937

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**TOWN OF NANTUCKET
INVITATION FOR BIDS**

POLPIS HARBOR MAINTENANCE DREDGING PROJECT

The Town of Nantucket, Massachusetts, the Awarding Authority, invites sealed bids for the maintenance dredging of an estimated $\pm 10,885$ cubic yards (CY) from the Polpis Harbor Entrance Channel using mechanical methods with the upland disposal (stockpiling) of sediments at the designated area located at 3 Shadbush Road off of New South Road, Nantucket, MA in accordance with the contract drawings and specifications. General Bidders may obtain complete sets of the Bidding Documents, including Bid Forms, online at <http://www.nantucket-ma.gov/199/Procurement>, for a downloadable set of the Bidding Documents. Addenda, if any, will be issued online. Any contract regarding this bid must be approved by the Town of Nantucket and the Town reserves the right to reject any and all proposals if it is in its best interest to do so. Questions about the above may be directed to Maria Davis, Office Administrator, 508-325-4100 Ext- 5700, Monday – Friday, 8:00 am – 4:00 pm.

Sealed bids will be received up to October 25, 2018 at 2:00 p.m. at the Nantucket Police Department Administrative Office, 2nd Floor, 4 Fairgrounds Road, Nantucket, MA 02554 until the time specified below at which time the bids will be publicly opened and read.

Bids will be opened at the above location, **Thursday, October 25, 2018 at 2:00 p.m.** Each Bid must be accompanied by a bid security consisting of a BID BOND, CASH, or, CERTIFIED CHECK issued by a responsible bank or trust company in the amount of 5% of the bid price.

All bids for this project are subject to applicable public bidding laws of Massachusetts, including, but not limited to G.L. c.149, §44A(2)(C) and c.30, §39M.

Contract award by the Town is contingent upon available funding.

Sealed bids shall be submitted on a form furnished by the Awarding Authority and clearly identified as a bid, endorsed with the name and address of the bidder, and the name of the project, and submitted to:

Maria Davis, Office Administrator
Nantucket Police Department
4 Fairgrounds Road, Second Floor
Nantucket, Massachusetts 02554

INSTRUCTIONS TO BIDDERS

1. Receipt and Opening of Bids

The Town of Nantucket, Massachusetts, herein called the Owner, will receive sealed Bids for the maintenance dredging of the Polpis Harbor Entrance Channel using mechanical means and upland disposal (stockpiling) of sediments at the designated area located at 3 Shadbush Road off of New South Road Nantucket, MA 02554.

This Project is subject to M.G.L. C. 149, §44A-44H and c.30, §39M, the provisions of which are incorporated herein by reference and shall control in the event of any conflict among these provisions and the provisions of the bid documents. It is the responsibility of every bidder and sub-bidder to know the requirements of M.G.L.c.149 §44A-44H and c.30, §39M,

The estimated construction cost for this Project is approximately \$850,000.00

Bids are being solicited for this project. All sealed bids shall be submitted on a form furnished by the Awarding Authority and clearly identified as a bid, endorsed with the name and address of the bidder, and the name of the project and submitted to:

Maria Davis, Office Administrator
Nantucket Police Department,
4 Fairgrounds Road, Second Floor
Nantucket, Massachusetts 02554.

All bidders shall provide with their bids:

- 1) Form of General Bid (Section 00300, pages 1 through 8)**
- 2) a Bid Bond, and**
- 3) a signed Certificate of Non-collusion (Section 00400-1)**
- 4) a signed Tax Compliance Certification (Section 00401-1)**

Bids must be endorsed "Bid for Polpis Harbor Maintenance Dredging " and must be received at the address listed above **no later than 2:00 prevailing time, on October 25, 2018**, at which time and place said bids will be opened and read aloud.

Any bid may be withdrawn prior to the above scheduled time for the opening of bids or authorized postponement thereof. Any bid received after the time and date specified will not be considered. The bidder agrees that this bid shall be good and may not be withdrawn for a period of 30 days, Saturdays, Sundays, and legal holidays excluded, after the opening of bids.

2. Location and Work to be Done

The Work consists of the maintenance dredging of up to an estimated $\pm 10,885$ cubic yards (CY) of sediments from the existing Entrance Channel which is located in Polpis Harbor using mechanical means. Sediments will be transported to and off-loaded at the Steamship Wharf located at 1 Steamboat Wharf, placed into trucks and transported to the designated upland disposal (stockpile) area located at 3 Shadbush Road off of New South Road, Nantucket, MA as more specifically described in the attached contract drawings and specifications.

The Contractor shall provide all labor, services, materials, equipment, plant, machinery, apparatus, appliances, tools, supplies, and all other things necessary to do all work required for the completion of each item of the Work and as herein specified.

The Work to be done and paid for under any item shall not be limited to the exact extent mentioned or described but shall include all incidental work necessary or customarily done for the completion of that item.

3. Preparation of Bid

Each bid must be submitted on the prescribed form. All blank spaces for bid prices must filled in, in ink or typewritten, in both words and figures.

Each bid must be submitted in a sealed envelope bearing on the outside the name of the bidder, his address, and endorsed with the name of the project as specified in Receipt and Opening of Bids, above. If forwarded by mail, the sealed envelope containing the bid must be enclosed in another envelope addressed as specified in Receipt and Opening of Bids, above.

4. Bid Opening Procedure

The following list of requirements shall apply to each bid. Bids not meeting all the requirements for timeliness and security will be rejected without opening; bids not meeting signature and addenda requirements will be rejected prior to checking of bid amounts.

Bids shall be filed at the place and before the time specified in Receipt and Opening of Bids, above.

Bid signatures will be checked.

All modifications to the bid documents will be issued electronically on the Town web site via an addendum. All registered plan holders will be electronically notified when addenda are issued. Hard copies of the addenda will not be forwarded to the plan holders.

The total dollar amount of each bid will be read, and the three apparent lowest bids will be selected for further consideration. These three apparent low bids will be read aloud for the benefit of the other bidders and the bid opening procedure will be closed. All those present at the bid opening may examine all bids after the bid opening and after the reading of the three apparent low bids.

5. Bid Modification

Any bidder may withdraw or modify his bid in a signed writing at any time prior to the scheduled closing time for receipt of bids, provided such writing is received by the Owner prior to the bid closing time. Written bid withdrawals and modifications must be sealed and submitted in the same manner as the original bid. Bidders may not withdraw their bid after the bid opening except as may otherwise be expressly provided by law.

6. Ability and Experience of Bidder

No award will be made to any bidder who cannot satisfy the Owner that he has sufficient ability and experience in this class of work and sufficient capital and plant to enable him to prosecute and complete the work successfully within the time named. The Owner's decision or judgment on these matters will be final, conclusive, and binding.

The Owner may make such investigations as he deems necessary, and the bidder shall furnish to the Owner, under oath if so required, all such information and data for this purpose as the Owner may request.

7. Conditions of Work

Each bidder must familiarize themselves fully with the conditions relating to the construction of the project and the employment of labor thereon. Failure to do so will not relieve a successful bidder of his obligation to furnish all material and labor necessary to carry out the provisions of his contract. Insofar as possible the Contractor, in carrying out his work, must employ such methods or means as will not cause any interruption of or interference with the work of any other Contractor.

8. Addenda and Interpretations

No interpretation of the meaning of the plans, specifications or other pre-bid documents will be made to any bidder orally. All information given to bidders other than by means of the plans, specifications, or by addenda, as described below, is given informally and shall not be used as the basis of a claim against the Owner.

Every request for such interpretation should be via email to the attention of Ms. Christine Player, Owner's Project Engineer, at Christine.Player@Foth.com to be given consideration must be received by no later than 12:00 PM on October 19, 2018. Any and all such interpretations and any supplemental instructions will be in the form of written addenda to the specifications which, addenda will be made available online at www.nantucket-ma.gov/199/Procurement, no later than two days prior to the date fixed for the opening of bids. Failure of any bidder to receive any such addendum or interpretation shall not relieve such bidder from any obligation under his bid as submitted. Hard copies of the addenda will not be forwarded to the plan holders. The bidder is solely responsible for reviewing all addenda posted online on the Town procurement website. All addenda so issued shall become part of the Contract Documents.

9. Security for Faithful Performance and Payment

The Contractor who is selected to perform the Work, will simultaneously with his delivery of the executed Contract, furnish construction performance and payment bonds in the amount of 100 percent (100%) of the contract amount as security for faithful performance and payment of all persons performing materials labor under this contract as specified in the herein. The surety on such bonds shall be a surety company qualified to do business under the laws of the Commonwealth and satisfactory to the Owner. The bonds shall remain in force for one year after final acceptance of the work by the Owner, unless the Owner, in writing, releases the Contractor from the obligation sooner.

10. Power of Attorney

Attorneys-in-fact who sign Contract bonds must file with each bond a certified and effectively dated copy of their power of attorney.

11. Laws and Regulations

The bidder's attention is directed to the fact that all applicable State laws, municipal ordinances or Bylaws, and the rules and regulations of all authorities having jurisdiction over construction of the project shall apply to the contract throughout, and they will be deemed to be included in the Contract the same as though herein written out in full.

12. Liquidated Damages for Failure to Enter into Contract

Subject to, and except as otherwise may be provided by G.L.c.149. §§ 44B and 44E. the successful bidder, upon his failure or refusal to execute and deliver the Contract and bonds required within five (5) days (Saturdays, Sundays and legal holidays excluded) after he/she has received notice of the acceptance of his/her bid, shall forfeit to the Owner, as liquidated damages for such failure or refusal, a portion of security deposited with his/her bid, but the amount forfeited shall not exceed the difference between his/her bid price and the bid price of the next lowest responsible and eligible bidder.

13. Obligation of Bidder

At the time of the opening of bids, each bidder will be presumed to have inspected the site and to have read and to be thoroughly familiar with the Contract Documents (including all addenda). The failure or omission of any bidder to examine any form, instrument, or document shall in no way relieve any bidder from any obligation in respect of his bid.

14. Information Not Guaranteed

All information given in the Contract Documents relating to subsurface and other conditions, natural phenomena and other existing structures is from the best sources at present available to the Owner. All such information is furnished only for the information and convenience of bidders and is not guaranteed.

It is agreed and understood that the Owner does not warrant or guarantee that the subsurface or other conditions, natural phenomena and other existing structures encountered during construction will be the same as those indicated in the Contract Documents.

It is further agreed and understood that no bidder or Contractor shall use or be entitled to use any of the information made available to him or obtained in any examination made by him in any manner as a basis of or ground for any claim or demand against the Owner or the Engineer, arising from or by reason of any variance which may exist between the information made available and the actual subsurface or other structures actually encountered during the construction work, except as may otherwise be expressly provided for in the Contract Documents.

15. Bid Security

As stated in G.L.c.149. § 44A, each bid must be accompanied by a bid bond of 5% of their bid in the form of a certified check, treasurer's or cashier's check, payable to Town of Nantucket, or a Bid Bond from a surety company in the amount stated in their Bid. Such checks will be returned to all except the three lowest responsible and eligible bidders within five days, Saturdays, Sundays, and legal holidays excluded, after the opening of bids, and the remaining checks will be returned promptly after the Owner and the accepted bidder have executed the Contract, or if no notice of intent to award has been presented to the selected contractor within 30 days, Saturdays, Sundays and holidays excluded, after the date of the opening of bids, upon demand of the bidder at any time thereafter.

16. Right to Reject Bid

The Owner reserves the right to waive any informalities in the bids, and to reject any and all bids, should the Owner deem it to be in the public interest to do so, and for any other reason as may be allowed by law.

The Owner may also reject bids which in its sole judgment are either incomplete, conditional, obscure or not responsive or which contain additions not called for, erasures not properly initialed, alterations, or similar irregularities, or the Owner may waive such omissions, conditions or irregularities.

17. Time for Completion

The successful Contractor shall commence work within ten (10) calendar days of the date of the Notice to Proceed or, in the absence of such a notice, of the date of execution of a contract with the Town, and to fully complete the project within the time limit stated in the Contract Documents.

18. Comparison of Bids

Bids will be compared on the basis of the price for the Work set forth in the submission of the FORM OF GENERAL BID.

In the event that there is a discrepancy in FORM OF GENERAL BID between the lump sum or unit prices written in words and figures, the prices written in words will govern.

The Owner agrees to examine and consider each FORM OF GENERAL BID submitted in consideration of the qualifications of the bidder and the bidder's agreements, as hereinabove set forth and as set forth in FORM OF GENERAL BID.

19. Award of Contract

The Contract will be awarded to "the lowest responsible and eligible bidder" pursuant to General Laws Chapter 149, Section 44A(2), as amended. Such a bidder shall possess the skill, ability and integrity necessary for the faithful performance of the work, shall be able to furnish labor that can work in harmony with all other elements of labor employed, or to be employed, in the work, and shall otherwise comply with all applicable provisions of law, including satisfaction of the OSHA requirements as stated in the Form of General Bid included herein and prescribed by G.L.c.149. § 44E.

20. Statutes Regulating Competitive Bidding

Any bid which does not comply with the provisions of Massachusetts General Laws Chapter 149, Sections 44A through 44H, as amended, need not be accepted and the Owner may reject every such bid.

21. Certificate of Eligibility and Update Statement

A certificate of eligibility issued by the Division of Capital Asset Management is not required.

22. Wage Rates

Prevailing Wage Rates as determined by the Commissioner of Department of Labor and Industries under the provision of the Massachusetts General Laws, Chapter 149, Section 26 to 27G, as amended, apply to this project.

State schedules of Prevailing wage rates are included in **Attachment A** of this contract document.

23. Contractor Records

The Contractor shall comply with the provisions of Massachusetts General Laws, Chapter 30, Section 39R and Chapter 149, Section 27B concerning Contractor records.

24. Insurance

The Contractor shall carry and continuously maintain until completion of the Contract, insurance as specified in the Contract Documents.

SECTION 00300

FORM OF GENERAL BID

Bid of _____ (hereinafter called "Bidder")*

☐ a corporation, organized and existing under the laws of the
state of: _____

☐ a partnership

☐ a joint venture

☐ an individual doing business as

To the Town of Nantucket, Massachusetts (hereinafter called "Owner").

Gentlemen:

A) The undersigned Bidder, in compliance with your invitation for bids for the project known as, Polpis Harbor Maintenance Dredging, having examined the plans and specifications and related documents and the site of the proposed work, and being familiar with all of the conditions surrounding the construction of the proposed project including the availability of materials and labor, hereby proposes to furnish all labor, materials, and supplies, and to construct the project in accordance with the contract documents and the plans and specifications within the time set forth below, and at the prices stated below. These prices are to cover all expenses incurred in performing the work required under the contract documents, of which this bid is a part.

The Bidder hereby agrees to commence work on or before the date to be specified in written "Notice to Proceed" of the Owner, and to fully complete the project by no later than January 14, 2019.

**Specify corporation, partnership or individual as applicable.*

B) Bidder acknowledges receipt of and this bid includes the following addenda:

Number:_____ Dated:_____

Number:_____ Dated:_____

Number:_____ Dated:_____

Number:_____ Dated:_____

C) The Bidder agrees to perform the bid work described in the specifications and shown on the plans for the following contract price:

_____ **Dollars**

(\$_____)

(insert words and numbers. In cases of conflict between words and numbers, words shall control)

REQUIRED BID SUBMITTAL FORM**SCHEDULE OF PRICES****POLPIS HARBOR MAINTENANCE DREDGING PROJECT
NANTUCKET, MA**

ITEM NUMBER	QUANTITY	ITEM WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT PRICE		TOTAL AMOUNT	
			DOLLARS	CENTS	DOLLARS	CENTS
02000-1	1 LS	SEDIMENT HANDLING/TRANSFER AREA Dollars () per LUMP SUM				
02405-1	1 LS	MOBILIZATION/DEMOBILIZATION Dollars () per LUMP SUM				
02405-2	10,885 CY	MECHANICAL DREDGING Dollars () per CUBIC YARD				
02405-3	10,885 CY	UPLAND SEDIMENT DISPOSAL AT STOCKPILE AREA Dollars () per CUBIC YARD				
02405-4	5 TONS	DEBRIS REMOVAL & DISPOSAL Dollars () per TON				
02405-5	5 TONS	SPECIAL DEBRIS REMOVAL & DISPOSAL Dollars () per TON				
02405-6	1 LS	SITE PREPARATION & RESTORATION UPLAND DISPOSAL (STOCKPILE) AREA Dollars () per LUMP SUM				
TOTAL BID AMOUNT						

The Bidder understands that all bids for this project are subject to the applicable bidding laws of the Commonwealth of Massachusetts, including General Laws Chapter 149 and Chapter 30, Section 39M, as amended.

The Bidder understands that the Owner reserves the right to reject any or all bids and to waive any informalities in the bidding.

The Bidder agrees that this bid shall be good and may not be withdrawn for a period of 30 days, Saturdays, Sundays and legal holidays excluded, after the opening of bids.

Within 10 days of receipt of the written notice of acceptance of this bid, the Bidder will execute the formal Agreement set forth in a draft copy in Section 00500 AGREEMENT.

Bid security is attached in the sum of five percent (5%) of the total bid in accordance with the conditions of Section 00100 INSTRUCTIONS TO BIDDERS. The bid security may become the property of the Owner in the event the contract and bond are not executed within the time set forth above.

The selected Contractor shall furnish performance and payment bonds in an amount at least equal to 100 percent (100%) of the contract price in accordance with Section 00610 CONSTRUCTION PERFORMANCE BOND and Section 00620 CONSTRUCTION PAYMENT BOND, and as stipulated in the contract.

The undersigned offers the following information as evidence of his qualifications to perform the work as bid upon according to all the requirements of the plans and specifications.

1. Have been in business under present name for _____ years.
2. The names and addresses of all persons interested in the bid (if made by a partnership or corporation) as principals, are as follows:

(attach supplementary list if necessary)

3. The bidder is requested to state below what work of a similar character to that included in the proposed contract he has done within the past five (5) years, and give references that will enable the Owner to judge his experience, skill and business standing (add supplementary page if necessary).

Completion Date:	Project Name:
Contract Amount:	Design Engineer:
Reference Name:	Telephone Nbr:

Completion Date:	Project Name:
Contract Amount:	Design Engineer:
Reference Name:	Telephone Nbr:

Completion Date:	Project Name:
Contract Amount:	Design Engineer:
Reference Name:	Telephone Nbr:

Completion Date:	Project Name:
Contract Amount:	Design Engineer:
Reference Name:	Telephone Nbr:

Bank Reference: _____
(Name)

(Bank)

(Address)

(Telephone No.)

CONTRACTOR EQUIPMENT LIST

POLPIS HARBOR MAINTENANCE DREDGING PROJECT NANTUCKET, MA

Contractor is required to submit for review, copies of all applicable current inspections and certificates, as applicable. Use additional sheets as necessary.

Proposed Equipment:

Type/Name	Manufacturer	Age & Condition

Signed by: _____

Title: _____

Pursuant to G.L. c.62C, §49A, I certify hereby in writing, under penalties of perjury, that the within named Bidder/Contractor has complied with all laws of the commonwealth relating to taxes, reporting of employees and contractors, and withholding and remitting of child support.

The undersigned Bidder hereby certifies under penalties of perjury, as follows: (1) that he/she is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed in the work; (2) that all employees to be employed at the worksite will have successfully completed a course in construction safety and health approved by the United States Occupational Safety and Health Administration that is at least 10 hours in duration at the time the employee begins work and who shall furnish documentation of successful completion of said course with the first certified payroll report for each employee; and (3) that all employees to be employed in the work subject to this bid have successfully completed a course in construction safety and health approved by the United States Occupational Safety and Health Administration that is at least 10 hours in duration.

The undersigned certifies under penalties of perjury that this bid is in all respects bona fide, fair and made without collusion or fraud with any other person. As used in this paragraph the word “person” shall mean any natural person, joint venture, partnership, corporation or other business or legal entity.

The undersigned bidder hereby certifies, under pains and penalties of perjury, that the foregoing bid is based upon the payment to laborers to be employed on the project of wages in an amount no less than the applicable prevailing wage rates established for the project by the Massachusetts Department of Labor and Workforce Development. The undersigned bidder agrees to indemnify the awarding authority for, from and against any loss, expense, damages, actions or claims, including any expense incurred in connection with any delay or stoppage of the project work arising out of or as a result of (1) the failure of the said bid to be based upon the payment of the said applicable prevailing wage rates or (2) the failure of the bidder, if selected as the contractor, to pay laborers employed on the project the said applicable prevailing wage rates.

Respectfully submitted:

Date: _____

By: _____

Signature

Type Name of Bidder

Title

Business Address

City, State, Zip

Telephone Number

PAGES 00300-1 thru 00300-8 MUST BE SUBMITTED WITH YOUR BID

SECTION 00400

CERTIFICATE OF NON-COLLUSION

The undersigned certifies under penalties of perjury that this bid or proposal has been made and submitted in good faith and without collusion or fraud with any person. As used in this certification, the word "person" shall mean any natural person, business, partnership, corporation, union, committee, club, or other organization, entity, or group of individuals.

CONTRACTOR NAME: _____

SIGNATURE: _____

PRINTED NAME: _____

DATE: _____

THIS PAGE, 00400-1 MUST BE SUBMITTED WITH YOUR BID

SECTION 00401

TAX COMPLIANCE CERTIFICATION

Pursuant to M.G.L. 62C, Sec. 49A, the undersigned certifies under the penalties of perjury that it, to the best knowledge and belief of management, has filed all state tax returns and paid all state taxes required under law (if any, are so required).

Signature: _____

Printed Name: _____ Title: _____

Date: _____

Tax ID Number: _____

THIS PAGE, 00401-1 MUST BE SUBMITTED WITH YOUR BID



SECTION 00500

DRAFT CONTRACT

AGREEMENT BETWEEN THE TOWN OF NANTUCKET, MASSACHUSETTS { CONTRACTOR }

THIS AGREEMENT made effective _____, 2018 by and between the TOWN OF NANTUCKET, MASSACHUSETTS a municipal corporation, acting by and through its Town Administration, with offices at 16 Broad Street, Nantucket, Massachusetts 02554 (hereinafter called the "TOWN"), { CONTRACTOR }, and whose principal office address and state of incorporation are as set forth on Attachment 'A' (hereinafter called the "CONTRACTOR").

RECITALS

WHEREAS, the TOWN desires to retain the CONTRACTOR to provide certain services for the TOWN, as described below, and the CONTRACTOR is willing to accept such engagement, all on the terms hereinafter set forth,

NOW, THEREFORE, in consideration of the mutual covenants hereinafter set forth, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties agree as follows:

ARTICLE 1 - ENGAGEMENT OF THE CONTRACTOR

- 1.01 The TOWN hereby engages the CONTRACTOR, and the CONTRACTOR hereby accepts the engagement to perform certain services for the TOWN, as described in Article 2.
- 1.02 In the performance of any service under this Agreement, the CONTRACTOR acts at all times as an independent contractor. There is no relationship of employment or agency between the TOWN, on the one hand, and the CONTRACTOR, on the other, and the TOWN shall not have or exercise any control or direction over the method by which the CONTRACTOR performs its work or functions aside from such control or directions which are consistent with the independent contractor relationship contemplated in the Agreement.

ARTICLE 2 - SERVICES OF THE CONTRACTOR

- 2.01 The CONTRACTOR will perform the services described in the Scope of Services set forth on Attachment 'A' (the "Work").
- 2.02 The CONTRACTOR shall report, and be responsible, to the TOWN and its designee as set forth on Attachment 'A'.

- 2.03** There shall be no amendment to the Scope of Services or Work provided for in this Agreement without the written approval of the TOWN. The TOWN shall be under no obligation to pay for any services performed by the CONTRACTOR, which are not explicitly agreed to by the TOWN in writing.
- 2.04** The CONTRACTOR represents and warrants to the TOWN that the CONTRACTOR (including all of its personnel, whether employees, agents or independent Architects or Engineers) will be qualified and duly licensed (if necessary) to perform the services required by this Agreement. CONTRACTOR further agrees to perform its services in a professional manner, and in accordance with the reasonable standard of care implied by law and all applicable local, state or federal ordinances, laws, rules and regulations, all of which are incorporated herein by reference. The CONTRACTOR agrees to use reasonable skill, care and diligence, that the work will be performed in a workmanlike manner, and that the Work, when completed, will be reasonably fit for its intended use. The CONTRACTOR will obtain and pay for any and all permits, bonds and other items required for the proper and legal performance of the Work.
- 2.05** The CONTRACTOR represents and warrants to the TOWN that it is not a party to any agreement contract or understanding, which would in any way, restricts or prohibits it from undertaking or performing its obligations hereunder in accordance with the terms and conditions of this Agreement.
- 2.06** All written materials and any other documents (whether in the form of "hard" copies, graphics, magnetic media or otherwise) which are received and produced by the CONTRACTOR pursuant to this Agreement shall be deemed to be "work for hire" and shall be and become the property of the TOWN upon the receipt and production of such items by the CONTRACTOR. The TOWN acknowledges that such materials are being prepared with respect to the specific project contemplated hereby and that any reuse of such materials by the TOWN in connection with any other project shall be at the TOWN's sole risk, unless otherwise agreed to by the CONTRACTOR in writing.
- 2.07** The CONTRACTOR shall be responsible for the professional and technical accuracy, and for the coordination, of all designs, drawings, specifications, estimates and other work or services furnished by CONTRACTOR or its consultants and subcontractors. The CONTRACTOR shall perform its work under this Agreement in such a competent and professional manner that detail checking and reviewing by the TOWN shall not be necessary. The CONTRACTOR shall supervise and direct the Work, using its best skills and attention, which shall not be less than such state of skill and attention generally rendered for projects similar to the subject project in scope, difficulty and location.
- 2.08** The CONTRACTOR shall not use any subcontractors or sub-consultants (not identified herein) for any work required under this Agreement unless the TOWN has approved such use in advance in writing.

- 2.09** Notwithstanding anything to the contrary in this Agreement, the CONTRACTOR shall not be relieved of its obligations under this Agreement by the TOWN's performance, or failure to perform, any of the TOWN's administrative duties under this Agreement, including, but not limited to, the TOWN's review and/or approval of plans, estimates, programs, documents, materials, work and services furnished by CONTRACTOR.

ARTICLE 3 - PERIOD OF SERVICES

- 3.01** Unless otherwise provided in Attachment 'A', the term of this Agreement shall commence on the date hereof and continue until the Work is completed to the TOWN's reasonable satisfaction. In no case shall the term of this AGREEMENT exceed three (3) years.
- 3.02** The CONTRACTOR shall proceed with the Work promptly after receiving Notice to Proceed and will diligently and faithfully prosecute the Work to completion in accordance with the provisions hereof. In any event, the Work shall be completed no later than the date set forth on Attachment 'A'. The CONTRACTOR acknowledges that time is of the essence of this Agreement.
- 3.03** If the CONTRACTOR is delayed in the performance of any of its obligations under this Agreement by the occurrence of an unforeseen event beyond its control such as fire or other casualty, abnormal adverse weather conditions, acts of God (collectively, "Unavoidable Events") which materially and adversely affect its ability to perform the Work, then the time for the CONTRACTOR to perform the Work shall be extended for such time as the TOWN shall reasonably determine is necessary to permit the CONTRACTOR to perform in light of the effects of the Unavoidable Event.
- 3.04** If an Unavoidable Event occurs which, in the TOWN's reasonable determination, makes the performance of the Agreement impossible without the expenditure of additional TOWN funds, the TOWN may, at its option, elect to terminate this Agreement upon thirty (30) days written notice.

ARTICLE 4 - PAYMENTS TO THE CONTRACTOR

- 4.01** The compensation due to the CONTRACTOR shall be paid in the amounts, and in the manner, set forth on Attachment 'B', attached hereto.
- 4.02** The CONTRACTOR will invoice the TOWN at the completion of the work unless otherwise provided on Attachment 'B', with one or more invoices broken down to show the quantity of work performed and the percentage of the entire project completed, categories and amount of reimbursable expenses (if any), and provide such supporting data as may be required by the TOWN.
- 4.03** The TOWN will pay the CONTRACTOR for completed satisfactory work upon review and approval of such invoices by the TOWN or its designee.

- 4.04** This engagement may be subject to budgetary restrictions, which may limit the total amount of funds available for the Work. Accordingly, unless otherwise stated on Attachment 'B', the TOWN will not be obligated to pay any amount in excess of the maximum project amount without the express written approval of the TOWN.
- 4.05** The CONTRACTOR and its sub-contractors shall not be compensated for any services involved in preparing changes that are required for additional work that should have been anticipated by the CONTRACTOR in the preparation of the documents, as reasonably determined by the TOWN.

ARTICLE 5 - TERMINATION

- 5.01** Either the TOWN or CONTRACTOR may terminate this Agreement with cause, upon written notice given by the non-defaulting party. For the purposes of this provision, "cause" shall include the failure of a party to adhere to the terms of this Agreement or fulfill its material duties hereunder in a timely and proper manner.
- 5.02** The TOWN shall have the right to terminate this Agreement for its convenience and without cause upon ten (10) days written notice.
- 5.03** Following termination of this Agreement, the parties shall be relieved of all further obligations hereunder except that:
- (a) unless the TOWN terminates for cause under paragraph 5.1, in which event the TOWN shall be under no obligation to make any payments to CONTRACTOR except for those services satisfactorily provided, the TOWN shall remain responsible for payments for the services satisfactorily performed and, unless this Agreement is for a lump-sum, expenses of CONTRACTOR reasonably accrued prior to the effective date of the notice of termination in compliance with this Agreement (less the value of any claims of the TOWN), all as determined by the TOWN in its sole discretion, but for no other amounts, including, without limitation, claims for lost profits on Work not performed; and
 - (b) The CONTRACTOR shall remain liable for any damages, expenses or liabilities arising under this Agreement (including its indemnity obligations) with respect to WORK performed pursuant to the Agreement.

ARTICLE 6 - INSURANCE

- 6.01** The CONTRACTOR agrees to indemnify and save the TOWN harmless from any and all manner of suits, claims, or demands arising out of any errors, omissions or negligence by CONTRACTOR (including all its employees, agents and independent contractors) in performing the Work, or any breach of the terms of this Agreement by such CONTRACTOR and shall reimburse the TOWN for any and all costs, damages and expenses, including reasonable attorney's fees, which the TOWN pays or becomes obligated to pay, by reason of such activities, or breach. The provisions of this Section, 6.1, shall be in addition to and shall not be construed as a limitation on, any other legal rights of the TOWN with respect to the CONTRACTOR, in connection with this Agreement, and shall survive termination or expiration of this Agreement.
- 6.02** Before commencing work the CONTRACTOR shall obtain and maintain at its expense and from insurance companies of an A.M Best rating of A or better, which are licensed to do business in the Commonwealth of Massachusetts, insurance as set forth below. If the CONTRACTOR is permitted to sub-contract a material portion of the Work, or is otherwise identifying a third party to perform services for the Town, the CONTRACTOR shall assure that such sub-contractor or other third party also has such insurance. The CONTRACTOR shall provide:
- (a) Workers' Compensation, covering the obligations of the CONTRACTOR in accordance with applicable Workers' Compensation or Benefits laws.
 - (b) Commercial General Liability Insurance on an occurrence basis with a combined single limit of not less than \$1 million. Coverage is to include premises and operations, coverage for liability of subcontractors. The policy shall contain an endorsement stating that the aggregate limits will apply separately to the work being performed under this Agreement.
 - (c) If vehicles are used in performing the Work, automobile liability insurance of not less than \$1 million combined single limit covering owned, hired and non-hired vehicles.
 - (d) Such additional insurance as may be required by law to be carried by the CONTRACTOR.
 - (e) Such additional insurance as the TOWN may reasonably require, as set forth on Attachment 'A'.

- 6.03** CONTRACTOR shall maintain such insurance during the term of Agreement and give the TOWN twenty (20) days written notice of any change or cancellation of coverage. Each insurer providing policies hereunder shall waive its rights to subrogate claims against the TOWN. The TOWN will be added as an additional named insured with respect to each such policy and such endorsement shall be reflected on a Certificate of Insurance to be delivered to the TOWN upon the execution of this Agreement and at such times thereafter as the TOWN may reasonably request.

ARTICLE 7 - PREVAILING WAGE

- 7.01** The Work subject to this Agreement is covered under the Massachusetts Prevailing Wage Law, G.L. c. 149, §§ 26 - 27 which establishes minimum wage rates for workers on public construction projects. The applicable prevailing wage rates are included in Attachment 'E'.
- 7.02** During the Work, it is the CONTRACTOR'S responsibility to submit weekly payroll records to the Town. Weekly payroll report forms are included in Attachment 'F'. All information set forth on the form must be provided.
- 7.03** The Town is prohibited by law for making payments to the CONTRACTOR for the Work completed without completed payroll records noted herein.

ARTICLE 8 - WARRANTY

- 8.01** One (1) year warranty for any installed parts with associated labor shall be included.
- 8.02** Any warranty disclaimer for fitness for a particular purpose and warranty of merchantability shall be void.

ARTICLE 9 - GENERAL PROVISIONS

- 9.01** Upon the expiration or the termination of this Agreement for any reason, all data, drawings, specifications, reports, estimates, summaries and other work product which have been accumulated, developed or prepared by the CONTRACTOR (whether completed or in process) shall become the property of the TOWN upon payment for such to the CONTRACTOR and the CONTRACTOR shall immediately deliver or otherwise make available all such material to the TOWN.

- 9.02** Neither party may assign, transfer or otherwise dispose of this Agreement or any of its rights hereunder or otherwise delegate any of its duties hereunder without the prior written consent of the other party, and any such attempted assignment or other disposition without such consent shall be null and void and of no force and effect.
- 9.03** This Agreement, together with Attachment 'A' (Contractor, Scope of Work, Term), Attachment 'B' (Payments), Attachment 'C' (Tax Compliance Certificate), Attachment 'D' (Certificate of Non-Collusion), Attachment 'E' (Prevailing Wage requirements), Attachment 'F' (Prevailing Wage Payroll Report), and any additional Attachments referred to herein, constitute the entire agreement of TOWN and CONTRACTOR with respect to the matters set forth therein and may not be changed, amended, modified or terms waived except by a writing signed by TOWN and CONTRACTOR. If there is any conflict among the terms set forth in the body of this Agreement and the terms or provisions set forth in the Attachments hereto, or in any other document or law incorporated by reference herein, the terms or provisions contained therein shall be interpreted with the following hierarchy, with the topmost document of the highest priority:
- (a) Applicable federal, state and local laws, rules and regulations.
 - (b) Amendments to this Agreement, if any.
 - (c) Attachments 'A', 'B', 'C', 'D', 'E' and 'F'.
 - (d) This Agreement.
 - (e) Any other Attachments to this Agreement.
- 9.04** To the extent the conflict is not resolved by applying the above hierarchy, the conflict shall be resolved in a manner that results in the highest quantity and best quality of goods and services to the TOWN.
- 9.05** This Agreement is governed by the laws of The Commonwealth of Massachusetts and shall be construed in accordance therewith. The parties agree that exclusive jurisdiction for any action arising out of or relating to this Agreement shall lie within courts for Nantucket County, Massachusetts and or the U.S. District Court for Massachusetts and the parties hereby irrevocably waive, to the fullest extent permitted by law, any objection which they may now or hereafter have to the venue of any proceeding brought in such location and further irrevocably waive any claims that any such proceeding has been brought in an inconvenient forum.
- 9.06** Any notices required or allowed shall be to the Contractors address as noted herein or the Towns address above by certified mail, return receipt requested.
- 9.07** Notwithstanding anything to the contrary in this Agreement, this Agreement is subject to the appropriation and availability of funds.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement the day and year first written above.

FOR THE CONTRACTOR:

{ CONTRACTOR }

FOR THE TOWN:

C. Elizabeth Gibson, Town Manager

Signature

Printed Name

Title

DATE: _____

DATE: _____

CONTRACTOR FEDERAL TAX EIN: _____

MUNIS VENDOR: _____

FUNDING SOURCE ORG/OBJ: _____

As to availability of funds:

Finance Department

Date

ATTACHMENT 'A'

- A.1 Name of CONTRACTOR: _____
- A.2 CONTRACTOR Address: _____
- A.3 State of Incorporation: _____
- A.4 Town Designee: _____
- A.5 Project Scope: _____

DRAFT

ATTACHMENT 'B'

PAYMENTS

B.1 Maximum Project Amount: _____

B.2 Payment Increment:

Progress payments upon submission and approval of monthly payment requisitions showing completed and approved work with prevailing wage payroll statements.

B.3 Reimbursable Expenses:

None

ATTACHMENT 'C'

TAX COMPLIANCE CERTIFICATION

Pursuant to M.G.L. 62C, Sec.49A, the undersigned certifies under the penalties of perjury that it, to the best knowledge and belief of management, has filed all state tax returns and paid all state taxes required under law (if any, are so required).

CONTRACTOR:

{ CONTRACTOR }

Signature

Printed Name

Title

Date

Tax ID Number: _____

ATTACHMENT 'D'

CERTIFICATE OF NON-COLLUSION

The undersigned certifies under penalties of perjury that this bid or proposal has been made and submitted in good faith and without collusion or fraud with any person. As used in this certification, the word "person" shall mean any natural person, business, partnership, corporation, union, committee, club, or other organization, entity, or group of individuals.

CONTRACTOR:

{ CONTRACTOR }

Signature

Printed Name

Title

Date

ATTACHMENT 'E'

PREVAILING WAGE LAW RATES

The following pages list wage rates for this project pursuant to the Massachusetts Prevailing Wage Law, G.L. c. 149, §§ 26 - 27; c. 5, § 1; c. 71, § 7A and c. 121B, § 29B.

DRAFT

ATTACHMENT 'F'

PREVAILING WAGE LAW FORMS

The following forms required to be submitted for payment pursuant to the Massachusetts Prevailing Wage Law, G.L. c. 149, §§ 26 - 27; c. 5, § 1; c. 71, § 7A and c. 121B, § 29B.

DRAFT

SECTION 00610

CONSTRUCTION PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS: that, WHEREAS, _____ ("Owner"), has awarded to _____, hereinafter designated as the "Principal", a contract (the "Contract"), the terms and provisions of which Contract are incorporated herein by reference, for constructing the following project:

**POLPIS HARBOR MAINTENANCE DREDGING
NANTUCKET, MA**

and

WHEREAS, said Principal is required under the terms of said Contract to furnish a bond for the faithful performance of said Contract;

NOW, THEREFORE, we, the Principal, and _____, as surety, are held and firmly bound unto Owner, in the penal sum of _____ and _____/100 Dollars (\$_____), lawful money of the United States, being one hundred percent (100%) of the Contract amount, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that if the above bounden Principal, his or its heirs, executors, administrators, successors or assigns, shall in all things stand to, and will truly keep and faithfully perform the covenants, conditions, and agreements in the said Contract and any alterations made as therein provided, on his or their part, to be kept and performed at the time and in the manner therein specified, and in all respects according to their true intent and meaning, and shall indemnify and save harmless, Owner, its Board, officers, employees and agents, as therein stipulated, then this obligation shall be null and void; otherwise it shall be and remain in full force and virtue.

As a condition precedent to the satisfactory completion of the said Contract, the above obligation shall hold good for a period of one (1) year after the completion and acceptance of the said work, during which time if the above bounded Principal, his or its heirs, executors, administrators, successors or assigns shall fail to make full, complete and satisfactory repair and replacements or totally protect the said Owner from loss or damage made evident during said period of one (1) year from the date of acceptance of said work, and resulting from or caused by defective materials or faulty workmanship, in the prosecution of the work done, the above obligation shall be and remain in full force and virtue.

And the said Surety, for value received, hereby stipulates and agrees to waive any consent to change, extension of time, alteration, or addition to the terms of the Contract or to the work to be performed thereunder or the Specifications accompanying the same shall in any way affect its obligations on this bond; and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract, or to the work, or to the Specifications.

In the event Owner, or its successors or assigns, shall be the prevailing party in an action brought upon this bond, then, in addition to the penal sum hereinabove specified, we agree to pay to the said Owner, or its successors or assigns, a reasonable sum on account of attorney's fees in such action, which sum shall be fixed by the court.

IN WITNESS THEREOF, the above bounden parties have executed this instrument under their seals this day of __ , _____, 2018, the name and corporate seal of each corporate party being hereto affixed, and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

Principal

Witness as to Principal

By:

Address

Surety

ATTEST:

Witness to Surety

Attorney-in-Fact

(Seal)

If **Contractor** is partnership, all partners must execute **BOND**.

SECTION 00620

CONSTRUCTION PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS: That we _____

_____ a _____
(Name of Contractor) (Corporation, Partnership, Joint Venture or Individual)

hereinafter called "Principal" and _____ of _____,
(Surety)

State of _____ hereafter called the "Surety" and licensed by the State
(City and State)

Division of Insurance to do business under the laws of the Commonwealth of Massachusetts, are held and firmly bound to the Town of Nantucket, Massachusetts hereinafter called "Owner", in the penal sum of _____ Dollars (\$_____) in lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that Whereas, the Principal entered into a certain contract with the Owner, dated the _____ day of _____, 2018 for the construction described as follows:

**POLPIS HARBOR MAINTENANCE DREDGING
NANTUCKET, MA**

NOW, THEREFORE, if the Principal shall promptly make payment to all persons, firms, subcontractors, and corporations furnishing materials for or performing labor in the prosecution of the work provided for in such contract, and any authorized extension or modification thereof, including all amounts due for materials, lubricants, oil, gasoline, coal and coke, repairs on machinery, equipment and tools, consumed or used in connection with the construction of such work, and all insurance premiums on said work, and for all labor, performed in such work whether by subcontractor or otherwise, then this obligation shall be void; otherwise to remain in full force and effect.

PROVIDED, FURTHER, that the said Surety, for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the work to be performed thereunder or the specifications accompanying the same shall in any way affect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of this contract or to the work or to the specifications.

PROVIDED, FURTHER, that no final settlement between the Owner and the Contractor shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in _____() counterparts, each one of which shall be deemed an original, this the _____ day of _____, 2018.

ATTEST:

Surety

By: _____

(Attorney-in-Fact)

(Address, City, State, Zip)

(SEAL)

Witness as to Surety

(Address, City, State, Zip)

NOTE: Date of Bond must not be prior to date of Contract. If Contractor is a Partnership, all partners should execute Bond

TECHNICAL SPECIFICATIONS

**POLPIS HARBOR MAINTENANCE DREDGING
NANTUCKET, MA**

**SECTION 01000
GENERAL AND SPECIAL CONDITIONS**

PART 1: GENERAL

1.01 SCOPE OF WORK

- A.** The work to be done under this contract consists of furnishing all labor, tools, materials and equipment required to construct the entire project, along with any and all necessary restoration. All work shall be performed as shown on the drawings, specified herein and/or is evidently required to complete the work and the specifications set forth herein.
- B.** The Owner may select a Contractor based upon proposals received. The Owner will require an executed contract, which it will prepare, and insurance certificates and bonds as set forth herein prior to any activities being commenced by the selected Contractor.
- C.** The proposal and schedule of value(s) as proposed by the Contractor in its offer shall be firm and include any and all labor, materials, equipment, supplies, overhead and profit to perform and deliver a complete project as set forth herein and on the project plans.
- D.** The Contractor must include any and all materials, labor, equipment or other items in each proposal item. If an item includes ancillary work or apparatuses, then the item must be priced by the Contractor to include such other work.
- E.** Measurements and calculations shall be reviewed for accuracy by the Project Engineer and prepared for submission to the Owner. The Contractor shall coordinate any and all construction activities to allow the Project Engineer to verify quantities such that verification activities are minimal and the processing of payment application is effectuated in a timely and organized manner.
- F.** Any requests for information (RFI's) shall be submitted to the Project Engineer in writing.

1.02 PROJECT SITE

- A.** The work to be performed is located within Polpis Harbor (dredge site), Steamship Wharf (sediment handling/transfer site) and the upland disposal (stockpile) site that is located at 3 Shadbush Road off New South Road in Nantucket, MA 02554. The

Project exact location is denoted as shown on the plans/drawings associated with this project.

1.03 DRAWINGS AND SPECIFICATIONS

- A. All work shall conform and be in accordance with these specifications and/or the accompanying drawings entitled:

**Polpis Harbor Maintenance Dredging
Nantucket, MA**

Project plans are dated October 9, 2018 and consist of the Cover Sheet and Sheets 1 through 2 as prepared by Foth-CLE Engineering, 15 Creek Road, Marion, MA 02738 (dated 10/05/2018; stamped by Scott R. Skuncik, P.E.) and are on file with the Owner at the Nantucket Police Department, 4 Fairgrounds Road, Second Floor, Nantucket, Massachusetts 02554 along with any changes, drawings and direction(s) that may from time to time be furnished by the Owner.

1.04 WORK SEQUENCE

- A. General: There are certain essential criteria relative to the preparation of a work sequence and time schedule that the Contractor will be required to implement and follow during the performance of all work. The Contractor shall begin work by establishing and/or verifying horizontal and vertical control, locating the project limits and mobilization of all necessary equipment on to the project site.
- B. The Contractor's schedule for progress and completion of work will be reviewed and approved by Owner and Project Engineer. The Contractor is advised that environmental permits restricts dredging from January 15th through October 3rd of any given year. As such, **all dredging shall be completed by no later than January 14th, 2019.**
- C. The Contractor shall be required to prosecute said work diligently and to complete the furnishing all labor, materials, equipment, and incidentals for the mechanical dredging and upland disposal (stockpiling) of up to an estimated $\pm 10,885$ cubic yards (CY) of sediment as removed from the Polpis Harbor Entrance Channel. **All dredging shall be completed by no later than January 14, 2019 in accordance with the Time of Year (TOY) restrictions identified in the environmental permits issued for this project.**
- D. The Contractor is advised construction activities are restricted by permits. The Contractor is advised and will be held to any and all permits and the constraints contained therein and shall review the project permits and application of statutes to determine what work is impacted by these restrictions and shall plan and price their work accordingly.

- E. Hours of Operation:** It is anticipated that dredging operations will be dependent on tides; therefore, dredging will be allowed 24 hours per day, seven (7) days per week, excluding holidays, for the entire specified construction period. The Contractor will be responsible for coordinating directly with the Steamship Authority (Elaine Mooney, Nantucket Terminal Manager, (508) 548-5011 ext. 259) to determine available times for the off-loading of dredge sediments at the Steamship Wharf. Off-loading operations will be limited to the hours of 7:00 AM and 10:00 PM and must accommodate daily operations of the Steamship Authority.
- F.** The Contractor is advised that completion of this project is essential to meeting the state grant funding requirements that are currently in place for the project.
- G.** The Contractor's work methods shall be planned and carried out such that there is no damage to any existing structures. Any and all existing structures are to be carefully and adequately protected, such that they are not in any way damaged or compromised. Any damage to adjacent structures or any property which is in any way damaged as a result of (directly or consequently) to any activities undertaken by the Contractor shall remain at all times at the Contractor's expense and peril.
- H.** The Order of Work shall be developed by the Contractor and submitted in his/her construction schedule. The Contractor will be responsible with coordinating construction activities with the Owner and daily uses that may occur within harbor areas, at the Steamship Wharf, along roadways and at the upland stockpile area(s). In addition, the Contractor shall plan his/her sequence of work understanding that the project may include areas within Polpis Harbor that could be susceptible to ice build-up.
- J.** In the event that all dredging activities are not completed on/before January 14, 2019, the Contractor shall demobilize and then re-mobilize to the project site no sooner than October 4, 2019 at no additional expense to the Owner and complete the dredging and disposal for the contract unit prices by no later than January 14, 2020. The Contractor will be responsible for the removal of any sediment that has accumulated within the established dredge area/depth upon the completion of dredging on January 14, 2019 and the re-commencement of operations on/after October 4, 2019 at no additional cost to the Owner. Should the Contractor be required to re-mobilize to the site to complete all required construction activities, he/she will be responsible for all costs and efforts associated with obtaining any/all permits that may expire prior to returning to the site and any costs associated with the loss of state grant funding that has been allocated for this project. The Contractor shall be fully responsible and shall indemnify to the fullest extent of the law the Owner for any fines, levy penalty charges incurred in prosecuting any portion of the work set forth herein.

1.05 CONTRACTOR'S LIABILITY INSURANCE

- A.** The Contractor shall purchase and maintain such insurance as will protect him from the Contractor's operations under the Contract, whether such operations be by himself/herself or by any Sub-Contractor or by anyone directly or indirectly employed by any of them or by anyone for whose acts any of them may be liable.
- B.** Insurance similar to that required of the Contractor shall be provided by or on behalf of all Sub-Contractors to cover their operations performed under the Contract Documents. The Contractor shall be held responsible for compliance with and enforcement of the insurance requirements and for any modifications of these insurance requirements as they apply to Sub-Contractors. The Contractor shall not permit any Sub-Contractor commence work until such Sub-Contractor has furnished evidence that insurance has been procured and certificates of insurance have been obtained by the Contractor providing that, in the event of restrictions in or cancellation of Sub-Contractor policies, thirty (30) days advance written notice be given to Contractor by U.S. first class mail.
- C.** The Contractor shall purchase and maintain during the term of this Contract, at a minimum, comprehensive liability insurance including:
 - 1. Commercial General Liability - \$1,000,000 each occurrence; \$2,000,000 general aggregate per project aggregate endorsement; \$2,000,000 completed operations/products aggregate; \$1,000,000 personal injury;
 - 2. Auto Liability - \$1,000,000 combined single limit including hired and non-owned auto and mobile equipment subject to registration/financial responsibility laws;
 - 3. Workers' Compensation - Statutory Limits;
 - 4. Employers Liability - \$100,000;
 - 5. Bodily Injury each accident - \$500,000;
 - 6. Bodily Injury by Disease - the greater of the policy limit or \$100,000 each employee; \$500,000 aggregate.
 - 7. Commercial Umbrella - \$2,000,000 each occurrence; \$4,000,000 general aggregate; \$1,000,000 completed operations/products aggregate; \$1,000,000 personal injury.

Such insurance shall include at least the following:

- 1. Comprehensive general liability insurance, including all products, premises-operations, and completed operations liability, independent Contractors, additional interests of employees, incidental medical malpractice liability,

including notice of occurrence and knowledge of occurrence endorsements satisfactory to the Owner.

2. Comprehensive business automobile liability insurance covering use of any motor vehicle to be used in conjunction with this contract with a minimum coverage of \$1,000,000. A compulsory Massachusetts automobile policy is acceptable for vehicles registered in Massachusetts only.
3. Coverage for loading and unloading of any motor vehicle must be covered by endorsement to the comprehensive (or compulsory) automobile liability policy.
4. Blanket contractual liability insurance covering all liabilities assumed under the Contract Documents.
5. Personal injury coverage endorsement (coverage's A, B, and C), with no exclusions for liability assumed contractually or injury sustained by employees of Contractor.
6. Excess Liability coverage in an amount which is to be no less \$1,000,000.
7. Broad form coverage for damage to property of the Owner, as well as other third parties, while in the care, custody, or control of Contractor.
8. Coverage for "XCU" hazards (explosion, collapse of buildings, blasting, undermining, and damage to underground property). Before any blasting is done, Contractor shall present evidence that blasting damage is included in Contractor's insurance coverage.
9. Insurance sufficient to discharge its obligations under all applicable workers' or workmen's compensation laws of the territories and states of the United States., the United States Longshoremen's & Harbor Workers Act, the Jones Act and Admiralty or Maritime Law. If any operations performed within the scope of this Contract by Contractor or its Sub-Contractors require the use of any aircraft or watercraft (owned or un-owned), Contractor shall maintain liability insurance satisfactory to, and naming as an additional insured, the Owner.
10. Insurance similar to that required of the Contractor shall be provided by or on behalf of all Sub-Contractors to cover their operations performed under the Contract Documents. The Contractor shall be held responsible for compliance with and enforcement of the insurance requirements and for any modifications of these insurance requirements as they apply to Sub-Contractors. The Contractor shall not permit any Sub-Contractor commence work until such time as the Sub-Contractor has furnished evidence that insurance has been procured and certificates of insurance have been obtained by the Contractor, forwarded to the Owner and provide that, in the event of restrictions in or cancellation of Sub-Contractor policies, thirty (30) days advance written notice be given to Contractor and Owner by registered mail.

11. Insurance certificates acceptable to the Owner evidencing the above coverages are to be furnished to the Owner prior to execution of any Contract. Any and all such certificates and all insurance policies required by these Insurance Requirements shall contain provisions requiring at least 30 (thirty) days prior written notice to the Owner of any cancellations of, or material change in the policies. Certificates shall indicate effective dates of expiration of policies and shall refer to the corresponding subparagraphs listed above. An additional certificate evidencing continuation of all insurance coverages is required to remain in force after final payment, and final payment under this contract shall be due until such certificate has been submitted to the Owner.
12. All insurance policies provided pursuant to the foregoing provisions of these Insurance Requirements shall be in the form and written by companies satisfactory to the Owner. All such policies shall contain provisions or endorsements necessary to assure coverage of claims by one insured against another. All required insurance policies are to be endorsed to state that the Contractor's policies shall be primary to all other insurance available to the Owner for liability arising out or resulting from the Contractor's operations under the Contract, whether such operations be by Contractor or by a Sub-Contractor or by anyone directly to indirectly employed by any of them or by anyone for whose acts any of them may be liable.
13. Insurance to satisfy the above requirements, or the furnishing of certificates evidencing same, shall not be a satisfaction of Contractor's liability under this Contract or in any way modify Contractor's indemnification of the Owner.
14. Without limitation of any other provisions of the Contract Documents, if (a) the Contractor's agreement herein to insure or to name as an insured the Owner with respect to contractual liability assumed by the Contractor under the terms of the Contract Documents or otherwise, or (b) any contract of insurance between the Contractor or any Sub-Contractor and its or their insurance company, shall to the extent be or be determined to be void and unenforceable, it is the intent of the Owner that such circumstances shall not otherwise affect the validity or enforceability of the Contractor's agreements and obligations under the Contract documents nor the validity or enforceability of such contract or insurance, each of which shall be enforced to the fullest extent permitted by law.
15. Insurance sufficient to discharge its obligations under all applicable workers' or workmen's compensation laws of the territories and states of the United States, the United States Longshoremen's & Harbor Workers Act, the Jones Act and Admiralty or Maritime Law.

16. In the event that the Contractor or the Contractor's insurance company fails to provide the Owner with documentation sufficient in the Owner's sole discretion to remedy all damage and loss to any property referred to in the above section.
17. Such limits of liability may be increased, from time to time, at the discretion of the Owner, upon thirty (30) days written notice to the Contractor. The Contractor shall promptly furnish the Owner with copies of such policies upon request. The Owner/Owner's Representative(s) shall be named as Additional Insured with respect to both ongoing and completed operations and Certificate Holder on all such policies (except Workers' Compensation). **Such policies must apply on a primary basis in relation to the Owner's own policy(ies), be non-contributing and shall include Waivers of Subrogation (except where prohibited by law), reference this Agreement and provide not less than 30 days prior notice to Contractor in the event of cancellation or non-renewal and not less than 10 days prior notice in the event of non-payment of premium.** It is the Contractor's obligation to tender a defense to the Owner/Owner's Representative(s) as the Additional Insured on a primary basis and non-contributory basis. Additional Insured coverage shall apply to all liability or potential liability relating to, resulting from, arising out of or caused in whole or in part by, or alleged to have been caused in whole or in part, by the Contractor's acts or omissions or the Contractor's alleged acts or omissions and applies whether performed by the Contractor or by others on behalf of the Contractor.
18. By requiring the above insurance, Contractor does not represent that coverage and limits will necessarily be adequate to protect the Contractor. The Owner reserves the right, in its sole discretion, to require higher limits or coverages on this project. If the Contractor has coverages or limits of liability in excess of those set forth above, said coverages and limits of liability shall be available accordingly.

1.06 SURETY BONDS

- A.** The Contractor shall obtain construction payment and performance bonds in the amount of one hundred percent (100%) of the Contract Price and naming the Owner and Project and present the bond to the Owner prior to the commencement of any work on the project.
- B.** The surety shall be "AAA" rated admitted in the Commonwealth of Massachusetts with duly granted authority to produce bonds and shall be approved by the Project Engineer as an acceptable security for the project. Any modifications, additions or deletions to the Contractor's proposal during the contract performance shall be the Contractor's expressed responsibility to notify the surety where the bond(s) are

procured. A failure to notify the surety of a material addition, deletion or modification to the project shall be at the Contractor's peril and shall be deemed as accepted by the Contractor's surety as ratified. The Contractor hereby warrants to the Owner that the Contractor's surety has had ample opportunity to review the plans, specifications and agreements and by issuing a payment and performance bond ratifies and agrees to be bound to the conditions and terms set forth herein and the Contractor's surety agrees to the same.

- C. The Contractor and Owner agree that any and all costs for procuring, securing or otherwise obtaining any of the aforementioned insurance and/or bonds is the expressed responsibility of the Contractor and has been included in the Contractor's proposal to the Owner.

1.07 PRE-BID MEETING

- A. A non-mandatory, Pre-bid meeting will be held on Wednesday, October 17, 2018 at 11:00 AM. The meeting will be held at Nantucket Police Department Administrative Office, 2nd Floor Conference Room which is located at 4 Fairgrounds Road, Nantucket, MA 02554 at which time the Project Engineer will present an overview and acquaint the Contractor with the work set forth thereunder. Any Contractor that does not attend waives any and all information that may have been provided or supplied or garnered by the Owner, the Owner's Project Engineer and or any third party during this meeting. The Contractor is to fully apprise himself or herself of the site conditions, access to the project site and price their proposal in order to take any and all constraints into account such that the Contractor is prepared to provide whatever means and at whatever costs necessary to insure that measures are in place to insure that the project is executed according to the plans and specification set forth herein. Questions regarding the site or to coordinate any access that the Contractor wants to undertake prior to the submission of a proposal may be sent via email to the Mr. Charles Gibson at CGibson@police.nantucket-ma.gov.
- B. Any question(s) pertaining to the plans, specifications, or any of the Contract Documents shall be submitted in writing, addressed to the attention of and delivered to the Owner's Project Engineer, Foth-CLE Engineering, 15 Creek Road, Marion, MA 02738, ATTN: Ms. Christine Player or, if via email, at Christine.Player@Foth.com. **To be given consideration, all questions must be received by no later than 12:00 P.M. on Friday, October 19, 2018.**
- C. The Contractor shall examine the existing conditions and thoroughly acquaint himself/herself with the obstacles and advantages of performing the work. The Contractor shall also study the drawings and compare the same with the information gathered during his examination of the site, as no extra compensation will be authorized for work resulting from the Contractor's unfamiliarity with the site and/or the drawings, or the conditions peculiar to this job.

1.08 SUBMITTALS

- A.** Shop drawings and brochures shall be submitted in accordance with the requirements of the General Conditions. Submittals are required for the items whether named or not. Additional submittals may be required by the Project Engineer which the Contractor will comply with at no additional cost(s) to be charged to the Owner.

1.09 PROGRESS SCHEDULE

- A.** The Contract shall begin dredging operations on/after November 19, 2018 with all dredging completed by January 14, 2019.
- B.** A progress schedule will be required for this project and is to be forwarded in writing to the Project Engineer five (5) days prior to the start of the work. No work may begin under the contract until the progress schedule, has been approved by the Owner.
- C.** Time required for review and approval of these items shall not constitute a basis for time extension. Full compensation for supplying the "Progress Schedule" and all required updates shall be considered as included in the contract prices paid for the various proposal items and no separate payment will be made.

1.10 DIFFERING SITE CONDITIONS

- A.** The Contractor shall promptly, and before such conditions are disturbed, notify the Project Engineer in writing of: (1) subsurface or latent physical conditions at the site, of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inhering in work of the character provided for in this contract. The Project Engineer shall promptly investigate the conditions, and if he finds that such conditions do materially so differ and cause an increase or decrease in the contractor's cost of, or the time required for, performance of any part of the work under this contract, whether or not changed as a result of such conditions, an equitable adjustment shall be made and the contract modified in writing accordingly.
- B.** No claim of the Contractor under this clause shall be allowed unless the Contractor has given the notice required in A. above; provided, however, the time prescribed therefore may be extended by the Owner.
- C.** No claim by the Contractor for an equitable adjustment hereunder shall be allowed if asserted after final payment under this contract.

1.11 CLEANING AND EQUIPMENT

- A.** During the progress of the work, the site shall be cleaned daily of all rubbish, packing materials or other debris. No debris capable of being wind-blown or washed away by rainfall shall be left unsecured on the site overnight. All roadways that have been used as access routes shall be swept on a regular basis, and kept in reasonably clean condition. "Reasonably clean" shall be defined as a condition acceptable to the local Department of Public Safety, and/or Department of Public Works having jurisdiction over the specific roadways. All equipment shall be located as authorized by the Project Engineer to provide that at the end of work day or shift the site or roadways are left in a passable condition and all equipment is safe and secure.

1.12 CONTRACT DOCUMENTS IN THE FIELD

- A.** The Contractor must keep a copy of the contract documents including but not limited to plans, specifications, schedule, materials list, daily reports, materials safety data sheets, and safety reports at the site of the work at all times while work is being performed and said copy is to be available to those in charge of the work, including the Owner and Project Engineer.

1.13 CONSTRUCTION SEQUENCE

- A.** For the protection of life and property any and all construction operations shall be phased such that the site is safe and secure. The Contractor shall insure that no-equipment or materials are left unattended.
- B.** The Contractor is responsible for the requisition and logistics of on-site local law enforcement detail where required by state or local law. Contractor's responsibilities include all contract and Sub-Contractor sites associated with the project and are inclusive of any and all pricing set forth herein.

1.14 UTILITIES

- A.** Prior to commencing work, the Contractor is responsible for obtaining the location, size and depth of all existing underground or underwater utilities and structures. Dig Safe Systems, Inc. (DIGSAFE) may assist in this task, but should not be considered comprehensive.
- B.** The Contractor shall assume that there are existing utility lines in the vicinity of the work, whether they appear on the drawings or not and should be independently verified by the Contractor using commercially reasonable methods that are normal and customary in the business of dredging site work.

- C. Existing utilities may not be known by the Owner or Project Engineer. The Contractor assumes any and all risks associated with the damage, disruption or repair of any utilities that are disturbed by any action(s) of the Contractor in the prosecution of the work set forth herein. As such, the Contractor will assure the Owner that any and all repairs to utilities that are damages by Contractor's operations will be made expeditiously, in a professional, workman like manner and must be satisfactory to both the Owner and Project Engineer at no additional cost to the Owner.
- D. It is not the intent of the plans to show the exact location of existing or relocated utilities, and the Owner assume no responsibility therefore. Whenever any such utilities are indicated thereon, the Contractor shall be responsible for verifying their actual location and depth in the field. The Contractor shall notify DIGSAFE (1-888-DIGSAFE (344-7233)) prior to excavation.
- E. The Contractor has reviewed the project site and areas surrounding the project and shall take full responsibility for existing utilities or apparatuses which may in any way impede, hamper or delay the Contractors performance of the work set forth herein. The Owner shall bear nor responsibility for the removal of or temporary relocation of any existing utilities or apparatuses.
- F. Where excavations are performed in the vicinity of underground utility mains and/or services the Contractor shall, as necessary, perform initial exploratory excavations to determine their exact depth and location. Extreme care shall be exercised to avoid damage, and it will be the Contractor's responsibility to have repairs made to existing facilities at his/her expense in the event of damage.
- G. Construction work for each site shall be coordinated with any work by other Contractors and utility entities to avoid conflicts. It is anticipated that any necessary work by others will be identified and performed prior to operations by the Contractor.
- H. Schedule constraints will be discussed at the pre-construction meeting and the Contractor shall consider such adjustments in contract scheduling as necessary.
- I. Full compensation for complying with the above provisions shall be considered as included in the contract price for the various proposal items and no separate payment will be made.

1.15 PROTECTION OF WORK AND PROPERTY

- A. The Contractor shall be responsible for the preservation of all public and private property or their prosecution of the work and shall carefully protect the property from disturbance or damage.

- B.** The Contractor shall be responsible for all damage or injury to public or private property resulting from any act, omission, neglect, or misconduct in, or either the Contractor's or it's Sub-Contractors' manner or method of executing the work, or in consequence of the non-execution thereof. Furthermore, the Contractor shall be responsible for all such damage due to defective materials or acts. The Contractor shall restore, at its own expense such property to a condition similar or equal to that existing before such damage or injury was done, by repairing, rebuilding, or otherwise restoring as directed by the Project Engineer.
- C.** All work is to be carefully protected so that no injury will come to it from water, frost, accident or other cause, and any injury, which will come to the work, is to be repaired by the Contractor at his expense. The Contractor shall protect the Owner's property, equipment and fixtures from injury, or loss. The Contractor shall protect the Owner's property from injury or loss arising in connection with this contract and he shall make good any damage, injury, or loss. The Contractor shall also adequately protect adjacent property as provided by statute and the contract documents.
- D.** The Contractor shall take all necessary precautions for the safety of employees on the work. The Contractor shall comply with all applicable provisions of federal, state and municipal safety laws and building codes to prevent accidents or injury to persons on, about, or adjacent to the premises where the work is being performed. The Contractor shall erect, properly maintain, at all times, as required by the conditions and progress of the work, all necessary fences, barriers, warning signs and lights that may be necessary to adequately protect the general public.
- E.** The Contractor shall provide temporary containment for all fuel tanks, pumps and appurtenances as a precaution against accidental spills or leaks. The Contractor shall maintain no greater than a two (2) day supply of fuel to any piece of equipment located on the site. The containment structures shall be capable of preventing releases of any fuel or other hazardous liquids to the environment, shall have volumes greater than that of the fuel tanks to be contained and shall be covered if necessary to eliminate the intrusion of rain water. In accordance with State or local laws and permit requirements, the Contractor shall furnish and maintain all other necessary containment materials to insure zero release of hazardous materials to the environment.

1.16 RESTORATION

- A.** The Contractor shall be solely responsible for performing any necessary acts and providing any materials required to restore areas disturbed during construction to their pre-construction condition. During the Pre-Proposal time period prior to submitting a Proposal, the Contractor shall note the condition of all areas within the project and include costs in their Proposal for full and complete restoration.

1.17 PERMITS, FEES AND BONDS

- A.** The Contractor shall obtain and comply with all required permits, pay all fees and provide all bonds necessary to complete the work as specified. The Contractor shall be solely responsible for performing any necessary acts and providing any materials required in order to comply with any and all terms and conditions set forth in any permits and licenses.

1.18 INTERPRETATION OF CONTRACT DOCUMENTS IN CASE OF CONFLICT

- A.** Where reference is made in the Contract Documents to publications, standards, or codes issued by associations or societies, such reference shall be interpreted to mean the current edition of such publications, standards, or codes, including revisions in effect on the date of the Advertisement, notwithstanding any reference to a particular date. The foregoing sentence shall not apply to the dates, if any, specified with respect to insurance policy endorsement forms.
- B.** In case of any conflict among the Contract Documents, unless the context clearly otherwise requires, the Contract Documents shall be construed according to the following priorities:

First Priority: Contract Modifications

Second Priority: Contractor Agreement

Third Priority: General Conditions of the Contract

Fourth Priority: Drawings

Schedules take precedence over enlarged detail Drawings, and enlarged Detail Drawings take precedence over reduced scale Drawings; figured dimensions shall prevail over scale.

Fifth Priority: Specifications

1.19 GENERAL CLAUSES AND CONDITIONS

- A.** A submittal shall not be allowed for any costs incurred more than twenty (20) days before the Contractor shall have notified the Owner' in writing of the act or failure to act involved (but this requirement shall not apply as to a claim resulting from a suspension or work notice), and unless the claim, in an amount stated, is asserted in writing as soon as practicable after the termination of the suspension, delay, or interruption, but not later than the date of final payment under the contract.

1.20 SUSPENSION OF WORK

- A.** The Owner may order the Contractor, in writing, to suspend, delay, or interrupt all or any part of the work of this contract for the period of time that the Project Engineer determines appropriate for the convenience of the Owner.
- B.** If the performance of all or any part of the work is, for an unreasonable period of time, suspended, delayed, or interrupted by an act of the Owner in the administration of this project, or by the Owner's failure to act within the time specified in this contract (or within a commercially reasonable time if not specified), an adjustment shall be made for any increase in the cost of performance of this project (excluding profit) necessarily caused by the unreasonable suspension, delay, or interruption, and the contract modified in writing accordingly. However, no adjustment shall be made under this clause for any suspension, delay, or interruption to the extent that performance would have been so suspended, delayed, or interrupted by any other cause, including the partial fault or partial negligence of the Contractor.
- C.** The Project Engineer reserves the right to suspend all or any portion of the work for any reasons during the execution of the work. If the work is suspended for a period of time and the Contractor believes the period is unreasonable and additional compensation and/or contract time is due, the Contractor shall submit to the Project Engineer in writing a request for adjustment within seven (7) calendar days of receipt of the notice to resume work. The request shall include the justification for adjustment.
- D.** Upon receipt, the Project Engineer will consider the Contractor's request. If the Project Engineer agrees that the cost and/or time required for the performance of the contract has increased as a result of such suspension and was caused by conditions beyond the control of and not the fault of the Contractor, suppliers, Sub-Contractors, the Project Engineer will make an equitable adjustment (excluding profit) and modify the contract in writing accordingly. No contract adjustment will be allowed unless the Contractor has submitted a request for adjustment within the time prescribed.
- E.** The Owner may terminate for their convenience, performance of work under in whole or, from time to time, in part if the Owner determine that a termination is in their interest. The Owner shall terminate by delivering to the Contractor a Notice of Termination specifying the extent of termination and the effective date. After receipt of a Notice of Termination, and except as directed by the Owner or Project Engineer, the Contractor shall immediately proceed with the following obligations, regardless of any delay in determining or adjusting any amounts due under this provision. Stop work as specified in the notice. Place no further subcontracts or orders (referred to as subcontracts in this clause) for materials, services, or facilities, except as necessary to complete the continued portion of the contract. Terminate all subcontracts to the extent they relate to the work terminated. With

approval or ratification to the extent required by the Project Engineer, settle all outstanding liabilities and termination settlement proposals arising from the termination of subcontracts; the approval or ratification will be final for purposes of this clause. The Owner shall be obligated to pay the Contractor for work in place and Contractor agrees that Owner's responsibility regarding the subject contract shall be limited only to work in place and the Contractor waives any rights or claims against the Owner for consequential damages should this project be terminated by the Owner for their convenience.

1.21 STAND-BY AND IDLE EQUIPMENT TIME

- A.** Equipment that is in operational condition and is standing by with the Project Engineer's approval will be paid for at 50 percent of the appropriate hourly rate as determined by the provisions set forth by the United States Army Corp of Engineers, Construction Equipment Township Schedule (EP 1110-1-8) less operating costs. Payment for such "stand-by" will be limited to not more than 8 hours in a 24 hour day or 40 hours in a normal work week.
- B.** No compensation will be allowed for equipment that is inoperable due to breakdown.
- C.** No payment will be allowed for equipment that is not operating because the work has been suspended in accordance with the specifications unless the suspension is for the convenience of the State. No payment will be allowed for equipment that is not operating because the work has been suspended by the Contractor for the Contractor's own reasons.
- D.** The hourly rate of compensation for idle equipment will be the monthly rate times a factor of 0.50 divided by 176 hours per month, regardless of the duration of the delay or stand-by.
- E.** The time for which such compensation will be paid will be the actual normal working time during which such delay condition exists, but will in no case exceed 8 hours in any one day.
- F.** The days for which compensation will be paid will be the number of working days charged during the existence of such delay. No compensation will be made for days that are considered lost due to weather as determined by the Project Engineer.
- G.** Compensation will only be made for equipment physically located at the work site that would be used to prosecute the delayed work during the existence of such delay.

1.22 SIGNIFICANT CHANGES IN SCOPE OF WORK

- A.** The Owner and/or the Project Engineer reserves the right to make, at any time during the work, such increases or decreases in quantities and such alteration in the work as necessary to satisfactorily complete the project. Such increases or

decreases and alterations shall not invalidate the contract nor release the Surety, and the Contractor agrees to perform the work as altered.

- B.** If the increase on any item of work for which a unit price exists in the contract does not exceed the lesser of \$100,000.00 or twenty (20) percent of the total contract price, then such increase shall be regarded as covered by the unit bid price for such items as contained in the original contract.
- C.** If the decrease on any item of work for which a unit price exists in the contract does not exceed twenty-five (25) percent of the contract quantity, then such decrease shall be regarded as covered by the unit bid price for such item as contained in the original contract.
- D.** If the alteration or decrease in an item of work significantly changes the scope or the character of the work, then an adjustment may be made to the unit price. The basis for the adjustment shall be agreed upon prior to the performance of the work. If a basis cannot be agreed upon, an adjustment will be made either for or against the Contractor in an amount as the Project Engineer may determine to be fair and equitable.

1.23 ELIMINATED ITEMS

- A.** Should any items contained in the proposal be found unnecessary for the proper completion of the work, the Project Engineer may, upon written order to the Contractor, eliminate such items from the contract, and such action shall in no way invalidate the contract.
- B.** If the Contractor is notified of the decrease or elimination of an item, reimbursement will be made for the reasonable cost of material incurred, in connection with such item or portions, prior to the date of such decrease or elimination made by order of the Project Engineer but in no case shall such compensation exceed the contract bid price for the item.
- C.** No claim shall be made by the Contractor for any loss of anticipated profits because of any alteration or variation between the approximate quantities and the quantities of work as done.

1.24 CONTRACTOR ABANDONMENT

- A.** The Contractor may not remove any mobilized equipment that is material to this project without the expressed written consent of the Project Engineer.

PART 2: PRODUCTS

2.01 GENERAL

- A.** Any and all products, materials and workmanship shall be warranted by the Contractor for a period of not less than one (1) year from the date of completion of the project. Completion shall be deemed as acceptance by the Owner of the final payment application prepared by the Contractor.

2.02 APPROVAL OF MATERIALS

- A.** As soon as practicable but not to exceed thirty (30) calendar days after award of the contract and before any materials or equipment are purchased, the Contractor shall submit to the Project Engineer a complete list of material and equipment to be incorporated in the work, together with the names and addresses of the manufacturer and their catalog numbers and trade names. Approval of materials will be based on manufacturer's published ratings. Materials that are incorporated into the project that have not been expressly approved by the Project Engineer will be subject to removal, replacement and or verification by the Project Engineer on behalf of the Owner and shall be solely at the Contractor's expense and peril.

2.03 SUBSTITUTIONS

- A.** If a specific means, method, technique, sequence, or procedure of construction is indicated in or required by the Contract Sections, the Contractor may furnish or utilize a substitute means, method, sequence, technique, or procedure of construction acceptable to the Owner, if the Contractor submits sufficient information to allow the Owner to determine that the substitute proposed is equivalent to that indicated or required by the Contract Sections, in quality, warranty, life-cycle costs, design cost, construction time, warranty, and efficiency considerations. Contractor may submit requests for substitution up to 35 days following Notice of Award after which time the Owner will consider substitutions in its sole discretion.
- B.** The Owner will respond in writing to the Contractor within ten (10) days indicating the time necessary to evaluate each proposed substitute. The Owner will be the sole judge of acceptability, and no substitute will be ordered, installed, or utilized without the Owner's prior written acceptance, which will be evidenced by either a change order or an approved shop drawing. The Owner may require the Contractor to furnish at the Contractor's expense a special performance guarantee or other surety with respect to any substitute.
- C.** The Owner will record time required by the Owner and the Owner's consultants in evaluating substitutions proposed by the Contractor and in making changes in the Contract Sections occasioned thereby. Regardless of whether or not the Owner

accept a proposed substitute, the Contractor shall reimburse the Owner for the charges of the Owner and Owner's consultants for evaluating each proposed substitute.

- D.** Cost or time impacts to other items of Contract work, which are caused by any Contractor initiated request for substitution, whether anticipated or unforeseen, shall be the responsibility of the Contractor.

2.04 TRADE NAMES

- A.** Whenever the Trade Name of a product, or the name of a Manufacturer appears in these Contract Documents or on the Plans, it shall be understood to specify the product so identified or its approved equal. The words "or equal" or "approved equal" shall mean equal in the opinion of and approved by the Project Engineer in writing. For convenience in designation, certain equipment or parts of materials may be designated under trade name or the name of a manufacturer or product and his catalogue information. The use of alternative equipment or parts or material which is of equal quality and of the required characteristics for the purpose intended will be permitted, subject to the written approval of the Project Engineer, in accordance with the following requirements:
1. The burden of proof as to the comparative quality and suitability of alternative equipment or Parts or materials shall be upon the Contractor and he shall furnish, at his own expense, all information necessary or related thereto as required by the Project Engineer. The Project Engineer shall be the sole judge as to the comparative quality and suitability of alternative equipment or Parts or materials and the decision of the Project Engineer shall be final.
 2. The above provisions shall not be construed as permitting the use of alternative equipment or parts or materials for equipment or Parts or materials which are not designated under a Trade Name or the name of a manufacturer or producer and his catalogue information, and for which detail specifications are set forth.

PART 3: EXECUTION

NOT USED

*****END OF SECTION*****

**POLPIS HARBOR MAINTENANCE DREDGING PROJECT
NANTUCKET, MA**

**SECTION 01100
MEASUREMENT & PAYMENT**

PART 1: GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Special Conditions and Technical Specification sections, apply to work of this section.

1.02 RESOLUTION OF CONSTRUCTION CLAIMS

- A. For Construction claims, the Owner and Contractor expressly agree to utilize informal conferences, non-binding judicially supervised mediation, and if necessary judicial arbitration to resolve disputes on construction claims of \$375,000 (three hundred and seventy five thousand dollars) or less.
- B. "Claim" means a separate demand by the Contractor for (1) a time extension, (2) payment of money or damages arising from work done by or on behalf of the Contractor pursuant to the Contract and payment of which is not otherwise expressly provided for or the Contractor is not otherwise entitled to, or (3) an amount the payment of which is disputed by the Owner.
- C. For any claim subject to this section, the following requirements apply:
1. Claims, including those alleging an error or omission by the Owner, shall be referred initially to the Owner for decision. An initial decision by the Owner shall be required as a condition precedent to mediation, arbitration, or litigation of all claims between the Contractor and Owner arising prior to the date final payment is due, unless 15 days have passed with the Owner failing to respond within the time prescribed. The Owner will not decide disputes between the Contractor and persons or entities other than the Owner.
 2. The claim shall be in writing and include the documents necessary to substantiate the claim. Claims must be filed on or before the date of final payment. Nothing in this subsection is intended to extend the time limit or supersede notice requirements otherwise provided by contract for the filing of claims.
 3. For claims of less than \$50,000 (fifty thousand dollars)
 - a. The Owner shall respond in writing to any written claim within forty-five (45) days of receipt of the claim, or may request in writing within thirty (30)

days of receipt of the claim, any additional documentation supporting the claim or relating to defenses to the claim the Owner may have against the Contractor.

- b. If additional information is thereafter required, it shall be requested and provided upon mutual agreement of the Owner and the Contractor.
 - c. The Owner's written response to the claim, as further documented, shall be submitted to the Contractor within fifteen (15) days after receipt of the further documentation or within a period of time no greater than that taken by the Contractor in producing the additional information or requested documentation, whichever is greater.
4. For claims of over fifty thousand dollars (\$50,000) and less than or equal to three hundred seventy-five thousand dollars (\$375,000)
- a. The Owner shall respond in writing to all written claims within sixty (60) days of receipt of the claim, or may request, in writing, within thirty (30) days of receipt of the claim, any additional documentation supporting the claim or relating to defenses to the claim the Owner may have against the Contractor.
 - b. If additional information is thereafter required, it shall be requested and provided upon mutual agreement of the Owner and the Contractor.
 - c. The Owner's written response to the claim, as further documented, shall be submitted to the Contractor within thirty (30) days after receipt of the further documentation or within a period of time no greater than that taken by the Contractor in producing the additional information, whichever is greater.
5. If the Contractor disputes the Owner's written response, or the Owner's fail to respond within the time prescribed, the Contractor may so notify the Owner, in writing, either within fifteen (15) days of receipt of the Owner's response or within fifteen (15) days of the Owner's failure to respond within the time prescribed, respectively, and demand an informal conference to meet and confer for settlement of the issues in dispute. Upon a demand, the Owner shall schedule a meet and confer conference within thirty (30) days for settlement of the dispute.
6. If following the meet and confer conference, the claim or any portion remains in dispute, the Contractor may file a claim. For purposes of those provisions, the running of the period of time within which a claim must be filed shall be tolled from the time the Contractor submits his or her written claim pursuant to the aforementioned parameters until the time the claim is denied as a result of the meet and confer process, including any period of time utilized by the meet and confer process.

7. This section does not apply to tort claims and nothing in this section is intended nor shall be construed to change the statutory time period for filing tort claims or actions specified by Massachusetts State Law or any applicable Federal Statute.
8. The following procedures are established for all civil actions filed to resolve claims subject to this section:
 - a. Within sixty (60) days, but no earlier than thirty (30) days, following the filing or responsive pleadings, the court shall submit the matter to non-binding mediation unless waived by mutual stipulation of both parties. The mediation process shall provide for the selection within fifteen (15) days by both parties of a disinterested third person as mediator, shall be commenced within thirty (30) days of the submittal, and shall be concluded within fifteen (15) days from the commencement of the mediation unless a time requirement is extended upon a good cause showing to the court or by stipulation of parties. If the parties fail to select a mediator within the fifteen (15) day period, any party may petition the court to appoint a mediator.
 - b. If the matter remains in dispute, the case shall be submitted to arbitration. Notwithstanding any other provision of the law, upon stipulation of the parties, arbitrators appointed for purposes of this article shall be experienced in construction law, and, upon stipulation of the parties, mediators and arbitrators shall be paid. Necessary and reasonable hourly rates of pay not to exceed their customary rate, and such fees and expenses shall be paid equally by the parties, except in the case of arbitration where the arbitrator, for good cause, determines a different division. In no event shall these fees or expenses be paid by State or County funds.

D. The Owner shall not fail to pay money as to any portion of a claim, which is undisputed except as otherwise provided in the Contract.

1.03 SCHEDULE OF VALUES

- A.** Coordination: Coordinate preparation of the Schedule of Values with preparation of Contractor's Construction Schedule.
 1. Correlate line items in the Schedule of Values with other required administrative forms and schedules, including Application for Payment forms with Continuation Sheets Submittals Schedule and Contractor's Construction Schedule.
 2. Submit the Schedule of Values to Project Engineer at earliest possible date but no later than seven days before the date scheduled for submittal of initial Applications for Payment.

3. Sub-schedules: Where the Work is separated into phases requiring separately phased payments, provide subschedules showing values correlated with each phase of payment.

B. Format and Content: Provide at least one line item for each Schedule of Values.

1. Identification: Include the following Project identification on the Schedule of Values:
2. Provide a breakdown of the Contract Sum in enough detail to facilitate continued evaluation of Applications for Payment and progress reports. Coordinate with the Project Manual table of contents. Provide several line items for principal subcontract amounts, where appropriate.
3. Round amounts to nearest whole dollar; total shall equal the Contract Sum.
4. For unit-price items, payment shall be based on the actual amount of work accepted and for the actual amount of materials in place, as shown by the final measurements.
 - a. All units of measurement shall be standard United States convention as applied to the specific items of work by tradition and interpreted by the Project Engineer.
 - b. The Contractor's Superintendent or other authorized representative of the Contractor shall meet with the Resident/Project Engineer and determine the quantities of unit price work accomplished and/or completed.
 - c. The Contractor shall prepare "Daily Progress Reports" which shall be signed by the Contractor's Representative and submitted on a weekly basis or as requested by the Project Engineer. These completed reports will provide the basis of the Project Engineer's monthly quantity estimate upon which payment shall be made. Items not appearing on both the Daily Progress Reports will not be included for payment. Items appearing on forms not properly signed by the Contractor will also not be included for payment.
 - d. After the work is completed and before final payment is made therefore, the Project Engineer will make final measurements to determine the quantities of various items of work accepted as the basis for final settlement.
5. Provide a separate line item in the Schedule of Values for each part of the Work where Applications for Payment may include materials or equipment purchased or fabricated and stored, but not yet installed.
6. Provide separate line items in the Schedule of Values for initial cost of materials, for each subsequent stage of completion, and for total installed value of that part of the Work.

7. Allowances: Provide a separate line item in the Schedule of Values for each allowance. Show line-item value of unit-cost allowances, as a product of the unit cost, multiplied by measured quantity. Use information indicated in the Contract Documents to determine quantities.
8. Each item in the Schedule of Values and Applications for Payment shall be complete. Include total cost and proportionate share of general overhead and profit for each item.
 - a. Temporary facilities and other major cost items that are not direct cost of actual work-in-place may be shown either as separate line items in the Schedule of Values or distributed as general overhead expense, at Contractor's option.
9. Schedule Updating: Update and resubmit the Schedule of Values before the next Applications for Payment when Change Orders or Construction Change Directives result in a change in the Contract Sum

1.04 EXTENT OF WORK

- D. BID ITEM 02000-1 Sediment Handling/Transfer Area:** This item includes all of the necessary work required for preparation, use, maintenance, protection, cleaning and restoration of the area identified on the Contract Drawings at Steamship Wharf for transferring dredge sediments from water to land and into trucks. Work under this item shall include, but not limited to, Contractor operations, installation, maintenance and removal of sedimentation controls, installation, maintenance and removal of temporary barriers/signage as necessary to manage the designated work area in a safe manner, any required traffic control, cleaning and maintenance of work area(s) and equipment including sweeping and/or other appropriate measures to ensure that any/all dredge sediments that have spilled during the transfer from water to land and into trucks are properly cleaned up, the protection/restoration of work areas and any adjacent areas impacted during construction.
- E. BID ITEM 02405-1 Mobilization and Demobilization:** This item includes all work associated with project preparations, procurement and assembly of all equipment, materials, supplies and labor, movement of equipment, accomplishing the work required by the Permits with respect to the protection of the environment, and bonds required for the dredging, handling, transportation and upland disposal (stockpiling) of sediments, segregation/disposal of debris and prosecution of work not otherwise included in other bid items and upon completion of work as specified and/or directed, and the removal of all equipment, materials and supplies from the work area upon project completion.
- F. BID ITEM 02405-2 Mechanical Dredging:** This item includes all material dredged from the Polpis Harbor Entrance Channel by mechanical means using a

closed environmental bucket, in-water transportation of scow(s), transfer of sediments from water to land and into trucks at the designated off-loading area at Steamship Wharf, Contractor verification survey(s) and establishment of all required horizontal and vertical control.

G. BID ITEM 02405-3 Upland Sediment Disposal at Stockpile Area: This item includes the truck transportation of dredge sediments from Steamship Wharf to the designated stockpile area as shown on the Contract Drawings, preparation of MADEP material tracking logs, cleaning and maintenance of all roadways, access ways and equipment, and the unloading, handling, managing and stockpiling of dredge sediments.

H. BID ITEM 02405-4 Debris Removal & Disposal: This item includes all labor, equipment and materials required for the collection, storage, handling, removal, and proper disposal of debris at an approved upland location encountered during dredging operations and recovered from the harbor bottom and/or floating, including abandoned/derelict moorings and all objects which, in the opinion of the Project Engineer, are debris in accordance with Section 02405, Mechanical Dredging & Upland Disposal.

I. BID ITEM 02405-5 Special Debris Removal & Disposal: This item includes all labor, equipment and materials required for the collection, storage, handling, removal and proper disposal at an approved upland location of all creosote-treated timbers encountered during dredging operations.

G. BID ITEM 02405-6 Site Preparation & Restoration Upland Disposal (Stockpile) Area: All labor, equipment and materials necessary to safely access, unload, manage, maintain and stockpile sediments at the designated location shown on Contract Drawings, installation and maintenance of staked haybales, erosion/run-off protection measures, water control (as required) and all related site restoration as necessary.

1.05 MEASUREMENT AND PAYMENT

A. BID ITEM 02000-1 Sediment Handling/Transfer Area: All work required for the preparation, use, maintenance, protection, cleaning and restoration of the area identified on the Contract Drawings at Steamship Wharf for transferring dredge sediments from water to land into and trucks. Work under this item shall include, but not limited to, Contractor operations, installation, maintenance and removal of sedimentation controls, installation, maintenance and removal of temporary barriers/signage as necessary to manage the designated work area in a safe manner, any required traffic control, cleaning and maintenance of work area(s) and equipment including sweeping and/or other appropriate measures to ensure that any/all dredge sediments that have spilled during the transfer from water to land and

into trucks are properly cleaned up, the protection/restoration of work areas and any adjacent areas impacted during construction shall be measured as a **LUMP SUM (LS)** unit cost.

- B. BID ITEM 02405-1 Mobilization and Demobilization:** All costs in connection to all preparatory work for the project including materials and equipment to the project site, coordination and submittals as required, but not limited to obtaining any necessary permits and approvals for the work specified in accordance with the Contract; full reimbursement for the premiums actually paid for the payment and performance bonds and any other work that is necessary in advance of the actual construction operations. Complete mobilization to the project site by the Contractor and all equipment necessary to complete the scheduled work as outlined in the plans and specifications to the satisfaction of the Owner. Upon completion of the said work, demobilization shall include the complete removal of all equipment, plant and excess materials and clean-up of the site. It shall also include any restoration of structures damaged by the Contractor's operations to the satisfaction of the Owner. All work performed under this bid item will be measured and paid as a **LUMP SUM (LS)** unit cost.

There will only be one mobilization and one demobilization paid. If for any other reason, the Contractor must shut down and remove his plant from the site, then re-mobilize, the Owner will not be responsible for payment of any additional costs associated with such work. If in the sole opinion of the Project Engineer, the Contractor's bid price for Mobilization appears unbalanced, the Owner may request that the Contractor provide a detailed breakdown of all mobilization costs. If the Contractor cannot justify his mobilization costs based on standard cost accounting procedures, the Owner will only be obligated to make a mobilization payment equal to the accepted detailed costs, plus an amount of 20% for the Contractor's overhead and profit, with the remaining costs being paid at the conclusion of the project. The maximum allowable payment for mobilization shall be 60% of the Contractor's accepted Bid Item for Mobilization/Demobilization or as substantiated by accounting data as set forth herein. The remaining 40% or any remaining contract funds owed under the Contractor Bid Item for Mobilization/Demobilization shall be paid for Demobilization, and shall be paid upon complete demobilization from the site, which shall include all cleanup and restoration as set forth herein and in accordance with the Contract Documents.

- C. BID ITEM 02405-2 Mechanical Dredging:** Material dredged from Polpis Harbor by mechanical methods and unloaded into trucks at Steamship Wharf shall be measured and paid based upon the **CUBIC YARDS (CY)** removed by computing the volume between the bottom surface shown by soundings of the Owner's Pre-Dredge Survey made before dredging, and the bottom surface shown by soundings of the Owner's Post-Dredge Survey made as soon as practicable after the entire work specified has been completed within the limits of the project

grade, less any deductions that may be required for dredging below the allowable overdredge depth described in Section 02405 1.02 SUMMARY OF WORK, 3.07 MISPLACED MATERIAL and 3.09 OVERDREDGE AND SIDESPLOPES.

Pre and Post-dredge payment surveys will be performed by the Owner's Project Engineer using automated survey positioning systems, and standards established by the US Army Corps of Engineers for "Special Order" Hydrographic Survey as specified in Appendix B of the Hydrographic Surveys Manual EM-1110-2-1003 (most recent edition). All surveys conducted by the Project Engineer will be performed with a dual frequency, 200 KHz/24KHz (or approved equal) single beam acoustic survey system. During survey events the proper survey acoustic frequency shall be selected by confirming acoustic depths with a number of manual soundings performed as indicated in the USACE Hydrographic Survey manual. Measurement and payment will be based on the 200 KHz acoustic soundings.

The maps and/or drawings already prepared are believed to represent accurately conditions existing on the date shown on the contract drawing(s). Determination of quantities removed and the deductions made therefrom to determine quantities by place measurement to be paid in the area specified, after having once been made, will not be reopened except on evidence of collusion, fraud, or obvious error.

D. BID ITEM 02405-3 Upland Sediment Disposal at Stockpile Area(s): All labor, equipment and materials necessary to transport, handle, manage and stockpile dredge sediments at the designated stockpile area will be measured per **CUBIC YARD (CY)** as computed under Bid Item 02405-2 and less any deductions that may be required for transporting/disposal of dredge sediment removed outside of the authorized dredge prism and as described in Section 02405 3.13 TRANSPORTING AND UPLAND DISPOSAL.

E. BID ITEM 02405-4 Debris Removal & Disposal: This item includes all labor, equipment and materials as required for the collection, storage, handling, removal, transportation and proper disposal of debris at an approved upland location encountered during dredging operations and recovered from the harbor bottom and/or floating, including abandoned/derelict moorings and all objects which, in the opinion of the Project Engineer, are debris in accordance with Section 02405, Mechanical Dredging & Upland Disposal of which shall be measured per **TON** disposed as per tonnage verified by certified weight slips.

F. BID ITEM 02405-5 Special Debris Removal & Disposal: This item includes all labor, equipment and materials required for the collection, storage, handling, removal, transportation and proper disposal at an approved upland location of all creosote-treated timbers encountered during dredging operations of which shall be measured per **TON** disposed as per tonnage verified by certified weight slips.

G. BID ITEM 02405-6 Site Preparation & Restoration Upland Disposal (Stockpile) Area: This item includes all labor, equipment and materials necessary to safely access, unload, manage, maintain and stockpile sediments at the designated location shown on Contract Drawings, installation and maintenance of staked haybales, erosion/run-off protection measures, water control (as required) and all related site restoration as necessary. All work performed under this bid item will be measured and paid as a **LUMP SUM (LS)** unit cost.

1.06 PAYMENT

- A.** The unit or lump sum prices for all items in the proposal schedule shall be full compensation for the work specified and shall include the cost of furnishing all supervision, materials, labor, tools, and equipment and all work and expenses incidental to and necessary to complete the work in accordance with the drawings and specifications.

1.07 PARTIAL PAYMENT

- A.** Unless otherwise agreed, Contractor shall submit to Owner, on or before the first day of each month, one (1) copy of a request for payment for the cost of the Work put in place during the period from the 1st day of the previous month to the 30th day of the previous month. Such requests for progress payments shall be based upon prices of all labor and acceptable materials incorporated in the Work up until midnight of the last day of that one month period, less the aggregate of previous payments. If the Contractor is late submitting its payment request, that payment request may be processed at any time during the succeeding one month period, resulting in processing of the Contractor's payment request being delayed for more than a day for day basis.
- B.** Acceptable materials shall be those materials, which will become a part of the finished construction work. The basis for partial payments of lump sum or other unit Contract items will be determined by agreement between the Owner and the Contractor. The Owner shall retain 5 percent of such estimated value of work done and 5 percent of the value of the materials so estimated to have been furnished and delivered and unused as aforesaid, and shall pay to the Contractor, while carrying on the Work, the balance not retained as aforesaid, after deducting therefrom all previous payments and all sums to be kept or retained under the provisions of the Contract.
- C.** No such estimate or payment shall be required to be made when, in the judgment of the Owner, the Work is not proceeding in accordance with the provisions of the Contract, or when, in the Owner's judgment, the total value of the Work done since the last estimate amounts to less than \$1,000.

D. No such estimate or payment shall be considered to be an acceptance of any defective Work or improper materials. All progress estimates and payments shall be subject to correction in the final estimate.

E. The Contractor shall, at the time any payment request is submitted, certify in writing the accuracy of the payment request and that the Contractor has fulfilled all scheduling requirements of this Section including updates and revisions. The certification shall be executed by a responsible officer of the Contractor.

1.08 FINAL PAYMENT

A. Contractor shall request a post dredge survey from the Project Engineer to verify project completion of dredging. As soon as practicable after Final Completion of the Work, the Contractor shall submit to the Owner a final request for payment for the cost of the Work, which request will show deductions for prior payments and any other amounts to be retained.

B. The amount determined due less the amount retained, will be paid. This retained amount will not be due or payable until 35 days after the completion of the Work and the filing of Notice of Completion and Acceptance in the manner provided by law, and until after the Contractor has furnished the Owner a release of all claims by the Contractor or Subcontractors against the Owner arising by virtue of this Contract, except such claims in definite amounts as the Contractor may specifically exempt from the operation of the release and the furnishing of any guaranty.

PART 2: PRODUCTS

NOT USED

PART 3: EXECUTION

NOT USED

*****END OF SECTION*****

**POLPIS HARBOR MAINTENANCE DREDGING
NANTUCKET, MA**

**SECTION 01300
SUBMITTALS**

PART 1: GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and General Provisions of this Contract, including General and Special Conditions and Technical Specifications sections, apply to this Section.

1.02 SUMMARY

- A. This Section specifies administrative and procedural requirements for submittals required for performance of the Work, including;

1.03 SUBMITTALS

- A. Submit the following reports directly to the Project Engineer:
 - 1. Submittal Schedule
 - 2. Request for Information (RFI)
 - 3. Project Schedule
 - 4. Verification of Underground Utilities
 - 5. Substitutions
 - 6. Work Plan
 - 7. Contractor's Equipment List
 - 8. Equipment Inspections and Certifications (as applicable)
 - 9. Project Health and Safety/Accident Prevention Plan
 - 10. Environmental Protection/Contingency Plan (including Hazardous Material Response)
 - 11. Emergency Procedures Plan
 - 12. Contractor's Quality Control Plan
 - 13. Daily Construction Reports (to be submitted weekly)
 - 14. List of all Subcontractors
 - 15. Dredging Plant (including environmental bucket specifications)

16. Re-fueling and Materials Control Plan/ Fuel Consumption Report
17. Daily Progress Plan
18. Project Tide Board Layout & Survey Data
19. Notice to Mariners & U.S. Coast Guard
20. Dredge Positioning System (including resume of individual who will be responsible for its setup, operation and maintenance)
21. Solid Debris Management Plan
22. Pre-Construction Photographs
23. Itemized Breakdown of LUMP SUM items

B. Administrative submittals: Refer to other Sections and other Contract Documents for requirements for administrative submittals. Such submittals include, but are not limited to:

1. Contractor Agreement
2. Performance, Payment and Warrantee bonds
3. Insurance certificates
4. Surety Bonds
5. Easements and Permits
6. Applications for Payment(s)
 - a. Lien Releases
 - b. Field Quantities
 - c. Certified Payrolls
 - d. Payment Surveys
 - e. Copies of Fathometer Rolls
 - f. Plot of Soundings
 - g. Digital Data Reduced to ASCII Format

PART 2: PRODUCTS

NOT USED

PART 3: EXECUTION

3.01 SUBMITTAL PROCEDURES

- A.** Coordination: Coordinate preparation and processing of submittals with performance of construction activities. Transmit each submittal sufficiently in advance of performance of related construction activities to avoid delay.

1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals and related activities that require sequential activity.
 2. Coordinate transmittal of different types of submittals for related elements of the Work so processing will not be delayed by the need to review submittals concurrently for coordination.
 - a. The Project Engineer reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.
- B. Submittal Preparation:** Place a permanent label or title block on each Submittal for identification. Indicate the name of the entity that prepared each Submittal on the label or title block.
1. Provide a space approximately 4" x 5" on the label or beside the title block on Shop Drawings to record the Contractor's review and approval markings and the action taken.
 2. Include the following information on the label for processing and recording action taken.
 - a. Project name.
 - b. Date.
 - c. Name and address of the Owner.
 - d. Name and address of Contractor.
 - e. Name and address of Sub-Contractor.
 - f. Name and address of supplier.
 - g. Name of manufacturer.
 - h. Number and title of appropriate Specification Section.
 - i. Drawing number and detail references, as appropriate.
- C. Submittal Transmittal:** Package each submittal appropriately for electronic transmittal to the Project Engineer. Transmit each submittal from Contractor to Project Engineer using a transmittal form. Submittals received from sources other than the Contractor will be returned without action.
1. On the transmittal, record relevant information and requests for data. On the form, or separate sheet, record deviations from Contract Document requirements, including minor variations and limitations. Include Contractor's certification that information complies with Contract Document requirements.

3.02 CONTRACTOR'S CONSTRUCTION SCHEDULE

- A.** Prepare a fully developed, bar type Contractor's construction schedule. Submit within seven (7) days of the date established for the "Pre-construction Meeting". Contractor's schedule shall be capable of electronic transmission and shall be in a

format substantially similar to project management software such as Microsoft Project® or other acceptable electronic media capable of providing the Project Engineer with electronic copies of any and all submitted schedules.

1. Provide a separate time bar for each significant construction activity. Provide a continuous vertical line to identify the first working day of each week. Use the same breakdown of units of the Work as indicated in the "Schedule of Values".
 2. Within each time bar indicate estimated completion percentage in twenty (20) percent increments. As Work progresses, place a contrasting mark in each bar to indicate Actual Completion.
 3. Prepare the schedule on a sheet, or series of sheets, of stable transparency, or other reproducible media, of sufficient width to show data for the entire construction period.
 4. Secure time commitments for performing critical elements of the Work from parties involved. Coordinate each element on the schedule with other construction activities; include minor elements involved in the sequence of the Work. Show each activity in proper sequence. Indicate graphically sequences necessary for completion of related portions of the Work.
 5. Coordinate the Contractor's construction schedule with the schedule of values, list of subcontracts, submittal schedule, progress reports, payment requests and other schedules.
 6. Indicate completion in advance of the date established for substantial Completion. Indicate substantial Completion on the schedule to allow time for the Project Engineer's procedures necessary for certification of substantial Completion.
- B. Phasing:** Provide notations on the schedule to show how the sequence of the Work is affected by requirements for phased completion to permit work by separate Contractors.
- C. Work Stages:** Indicate important stages of construction for each major portion of the Work, including testing and installation.
- D. Cost Correlation:** At the head of the schedule, provide a two item cost correlation line, indicating "pre-calculated" and "actual" costs. On the line show dollar-volume of Work performed as of the dates used for preparation of payment requests.
- E. Distribution:** Following response to the initial submittal, print and distribute copies to the Project Engineer, Sub-Contractors, and other parties required to comply with scheduled dates. Post copies in the temporary field office if applicable.

1. When revisions are made, distribute to the same parties and post in the same locations. Delete parties from distribution when they have completed their assigned portion of the Work and are no longer involved in construction activities.
- F. Schedule Updating:** Revise the schedule after each meeting or activity, where revisions have been recognized or made or milestones are reached in the project. Issue the updated schedule within three (3) days of such event, but in no circumstance less than weekly.

3.03 WORK PLAN

- A.** Within seven (7) days after receipt of Notice to Proceed, the Contractor shall furnish a detailed work plan to the Owner's Engineer for review and approval. This plan shall include, but not limited to, dredging operations, sediment handling/transfer and management operations at Steamship Wharf, trucking route and daily truck traffic anticipated to haul sediments to the designated stockpile area, site preparation, sediment unloading, handling, management and stockpiling at the designated upland disposal site. This plan shall include a description of all proposed water and land-based equipment to be utilized in performance of the contract work along with daily production rates anticipated for dredging and trucking of sediments to the designated stockpile area. No dredging will not be permitted to commence until this plan, is approved by the Owner's Project Engineer.

3.04 SUBMITTAL SCHEDULE

- A.** After development and acceptance of the Contractor's construction schedule, prepare a complete schedule of submittals. Submit the schedule within seven (7) days of the date required for establishment of the Contractor's construction schedule.
1. Prepare the schedule in chronological order; include submittals required during construction. Provide the following information:
 - a. Scheduled date for the first submittal.
 - b. Submittal category.
 - c. Name of Sub-Contractor.
 - d. Description of the part of the Work covered.
 - e. Scheduled date for re-submittal
 - f. Scheduled date for final release or approval.
- B. Distribution:** Following response to initial submittal, print and distribute copies to the Project Engineer, Sub-Contractors, and other parties required to comply with submittal dates indicated. Post copies in the temporary field office (if applicable).

1. When revisions are made, distribute to the same parties and post in the same locations. Delete parties from distribution when they have completed their assigned portion of the work and are no longer involved in construction activities.

3.05 DAILY CONSTRUCTION REPORTS

A. The Contractor shall prepare a daily construction report, recording the following information concerning events at the site; and submit duplicate copies to the Project Engineer at weekly intervals or as requested:

1. List of Sub-Contractors at the site.
2. Approximate count of personnel at the site.
3. High and low temperatures, general weather conditions.
4. Accidents and unusual events.
5. Meetings and significant decisions.
6. Stoppages, delays, shortages, losses.
7. Daily plan of areas worked.
8. Emergency procedures.
9. Any Orders and or requests of governing authorities.
10. Change Orders received and implemented.
11. Substantial Completions authorized.
12. Digital photographs of project site prior to and following the completion of construction on CD.

3.06 SHOP DRAWINGS

A. The Contractor shall submit newly prepared information, drawn to accurate scale. Highlight, encircle, or otherwise indicate deviations from the Contract Documents. Do not reproduce Contract Documents or copy standard information as the basis of Shop Drawings. Standard information prepared without specific reference to the Project is not considered Shop Drawings.

B. The Contractor shall submit shop drawings, which include fabrication and installation drawings, setting diagrams, schedules, patterns, templates and similar drawings. The following information must be included:

1. Dimensions.
2. Identification of products and materials included.
3. Compliance with specified standards.
4. Notation of coordination requirements.
5. Notation of dimensions established by field measurement.
6. Sheet Size: Except for templates, patterns and similar full- size Drawings, submit Shop Drawings on sheets at least 8-1/2" x 11" but no larger than 36" x 48".
7. Initial submittal: Submit one correctable translucent reproducible print and one blue line- or black-line print for the Project Engineer's review; the reproducible print will be returned to the Contractor.
8. Final submittal: Submit three (3) blue line- or black-line prints; Submit five (5) prints where required for maintenance manuals. Two (2) prints will be retained; the remainder will be returned.
 - a. One of the prints returned shall be marked-up and maintained as a "Record Document".
9. Do not use Shop Drawings without an appropriate final stamp indicating action taken in connection with construction.

3.07 PROJECT ENGINEER'S ACTION

- A.** Except for submittals for the record, information or similar purposes, where action and return is required or requested, the Project Engineer will review each submittal, mark to indicate action taken, and return promptly.
- B.** Action Stamp: The Project Engineer will stamp each submittal with a uniform, self-explanatory action stamp. The stamp will be appropriately marked, as follows, to indicate the action taken:
1. Final Unrestricted Release: Where submittals are marked "No Exception Taken," that part of the Work covered by the submittal may proceed

provided it complies with requirements of the Contract Documents; final acceptance will depend upon that compliance.

2. Final-But-Restricted Release: When submittals are marked "Approved as Noted," that part of the Work covered by the submittal may proceed provided it complies with notations or corrections on the submittal and requirements of the Contract Documents; final acceptance will depend on that compliance.
3. Returned for Re-submittal: When a submittal is marked "Revise and Resubmit," do not proceed with that part of the work covered by the submittal, including purchasing, fabrication, delivery, or other activity. The Contractor is to revise or prepare a new submittal in accordance with the notations; resubmit without delay to the Project Engineer. The Contractor shall repeat if necessary to obtain a different action mark.
 - a. Do not permit submittals marked "Revise and Resubmit" to be used at the Project site, or elsewhere where Work is in progress.
4. Other Action: When a submittal is primarily for information or record purposes, special processing or other activity, the submittal will be returned to the Contractor, marked "Action Not Required".

*****END OF SECTION*****

**POLPIS HARBOR MAINTENANCE DREDGING
NANTUCKET, MA**

**SECTION 01500
TEMPORARY FACILITIES**

PART 1: GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Special Conditions and Technical Specifications sections, apply to this Section.

1.02 SUMMARY

- A. This Section specifies requirements for temporary services and facilities, including utilities, construction and support facilities, security and protection.
- B. Temporary utilities may be required and include but are not limited to:
 - 1. Portable electric power and light.
 - 2. Cellular Telephone service.
- C. Temporary construction and support facilities required include but are not limited to:
 - 1. Sanitary facilities, including drinking water.
- D. Security and protection facilities required include but are not limited to:
 - 1. Environmental protection.
 - 2. Emergency Spill Response Kit.

1.03 QUALITY ASSURANCE

- A. Regulations: Comply with industry standards and applicable laws and regulations of authorities having jurisdiction, including but not limited to:
 - 1. Building Code requirements.
 - 2. Health and safety regulations.
 - 3. Utility company regulations.
 - 4. Police, Fire Department and Rescue Squad rules.
 - 5. Environmental protection regulations.

1.04 PROJECT CONDITIONS

- A. Conditions of Use: The Contractor shall keep temporary services and facilities clean and neat in appearance. Operate in a safe and efficient manner. Take necessary fire prevention measures. Do not overload facilities, or permit them to

interfere with progress. Do not allow hazardous, dangerous or unsanitary conditions, or public nuisances to develop or persist on the site.

PART 2: PRODUCTS

NOT USED

PART 3: EXECUTION

3.01 INSTALLATION

- A.** The Contractor shall use qualified personnel for installation of temporary facilities. Locate facilities where they will serve the Project adequately and result in minimum interference with performance of the Work. The Contractor shall relocate and modify facilities as required.
- B.** The Contractor shall provide each facility ready for use when needed to avoid delay. The Contractor shall maintain and modify as required. The Contractor shall not remove any facility until facilities are no longer needed, or are replaced by authorized use of completed permanent facilities.

3.02 TEMPORARY CONSTRUCTION AND SUPPORT FACILITIES INSTALLATION

- A.** The Contractor shall locate sanitary facilities and any other temporary construction and support facilities, as required, for easy access.
- B.** The Contractor shall maintain temporary construction and support facilities until near Substantial Completion. Remove prior to Substantial Completion. Personnel remaining after Substantial Completion will be permitted to use permanent facilities, under conditions acceptable to the Owner and/or Project Engineer.
- C.** The Contractor shall install self-contained toilet units. Shield toilets to ensure privacy. Use of pit-type privies will not be permitted. Provide toilet tissue, paper towels, paper cups and similar disposable materials for each facility. Provide covered waste containers for used material.
- D.** The Contractor shall provide containerized tap-dispenser bottled-water type drinking water units, including paper supply.

3.03 PERMITS AND CODES

- A.** Comply with all applicable codes, ordinances, rules, regulations and laws of all local, municipal, and state authorities having jurisdiction over the work, without additional cost to the Owner.

*****END OF SECTION*****

**POLPIS HARBOR MAINTENANCE DREDGING
NANTUCKET, MA**

**SECTION 01600
ENVIRONMENTAL PROTECTION**

PART 1: GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Special Conditions and Technical Specifications sections, apply to this Section.
- B. The Contractor must fully adhere to the provisions set forth in **all permits** and shall hold the Owner/Owner' Engineer harmless for any failure to adhere to a permit condition. Permits that have been issued for this project are included at the end of these specifications in **Attachment B**.

1.02 SUMMARY

- A. This Section specifies requirements for environmental protection.

1.03 SUB-CONTRACTORS

- A. Assurance of compliance with this specification by Sub-Contractors will be the responsibility of the Contractor.

1.04 NOTIFICATION

- A. The Project Engineer shall notify the Contractor in writing of any observed non-compliance with the Federal, State or local laws or regulations, permits and other elements of the Contractor's environmental protection plan. The Contractor shall, after receipt of such notice, inform the Project Engineer of proposed corrective actions and take such actions as may be approved. If the Contractor fails to comply promptly, the Project Engineer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No time extensions shall be granted, nor costs or damages allowed to the Contractor for any such suspension.

1.05 FINES AND PENALTIES

- A. The Contractor shall be solely responsible for any and all permit violations and fines levied thereto as a result of their construction or operations. The Contractor indemnifies the Owner and Project Engineer from any fines or penalties levied and shall defend said fines or penalties as its sole cost with the Owner' cost relating to any defense of said fines or penalties to be assessed to the Contractor.

PART 2: PRODUCTS

NOT USED

PART 3: EXECUTION

3.01 GENERAL

- A.** The Commonwealth of Massachusetts along with other Municipal and Federal Agencies have issued permits, orders of conditions and strict regulations for construction in environmentally sensitive areas. In addition to any orders, the following restrictions apply:
1. Under no circumstance shall any equipment will be allowed to operate (including grounding of vessels and storage of materials) in or on any of the adjoining eelgrass beds, salt marshes, or mudflats. In addition, no equipment will be operated in such a manner as to cause damage to these areas.
 2. Absolutely no release is allowed into any waterway of any petroleum product, epoxies, resins, admixtures, touch-up coatings, concrete, waste water of any kind, any foreign particular which is associated with any of the activities, or the like of the Contractor. Accidental releases shall be reported to the appropriate authority, Harbormaster, and, if applicable, the U.S. Coast Guard. The Contractor assumes all responsibilities for fines or penalties levied and agrees to fully indemnify the Owner and Project Engineer for any accidental, negligent or intention discharge of any foreign material into any waterway associated with the work prescribed herein.
 3. Prior to beginning any work the Contractor shall submit, in writing, a contingency plan, subject to approval by the Project, which will set forth the procedures to be followed in the event of an accidental release. This plan will require, as a minimum, that the Contractor have on-site, sufficient sorbant pads and booms to contain an accidental spill. Absolutely no work shall begin on the project until this plan has been approved by the Owner and/or the Project Engineer.
 4. Debris from construction operations is to be cleaned up on a regular basis and disposed of off-site at a properly designated facility at the Contractor's expense. Any floating debris and cuttings shall be contained in the work area by floating booms or other suitable means as approved by the Project Engineer. At no time shall debris/cuttings be allowed to drift about any waterway. Organic debris (epoxies, etc.) are considered releases and shall be cleaned up immediately in accordance with the approved plan.
 5. In the event that wetland areas are destroyed in conjunction with the construction, it shall be replaced, at no cost to the Owner, by a firm experienced in restoration of such areas.

6. Any materials stored or stockpiled on the site will be assessed for its potential to create a run off problem. Such materials shall be stored and/or protected in such a way that run off from the stockpiles will not create a nuisance or damage down gradient resource areas. Any and all property located at or used in conjunction with this project shall be returned to pre-construction conditions prior to completion of project and release of demobilization retainage.

3.02 PROTECTION OF ENVIRONMENTAL RESOURCES

- A.** The environmental resources within the project boundaries and those affected outside the limits of permanent work under this contract shall be protected during the entire period of this contract. The Contractor shall confine his activities to areas defined by the drawings and specifications.
- B.** Areas of eelgrass exist within Polpis Harbor and within the vicinity of areas that require dredging as shown on the Contract Drawings. The Contractor shall install temporary buoys as required to sufficiently mark eelgrass within 500 feet of the construction footprint prior to the start of work to facilitate complete avoidance during dredging operations.
- C.** Work and Staging Area Limits: Prior to any construction the Contractor shall mark the areas that are required to accomplish all work to be performed under this contract. Monuments and markers shall be protected before construction operations commence. The Contractor shall convey to his personnel the purpose of marking and/or protection of all necessary objects.
- D.** Best Management Practices (BMPs) shall be deployed to minimize turbidity. Dredging shall be carried out using closed, environmental bucket. If a silt curtain is required to address turbidity issues, it shall be bottom-weighted and of suitable material/grade appropriate with the velocity of the current at the site and be placed at a location that does not bottom out during low tide.
- E.** Disposal of Uncontaminated Solid Wastes: Solid wastes shall be placed in containers, which are emptied on a regular schedule. All handling and disposal shall be conducted to prevent contamination.
- F.** Disposal of Solid Waste by Removal from the Work Site: The Contractor shall transport all uncontaminated solid waste off of the work site and dispose of it in compliance with Federal, State and local requirements for solid waste disposal.
- G.** Disposal of Discarded Materials: Discarded materials other than those which can be included in the solid waste category will be handled as directed by the Project Engineer. The Contractor shall comply with Title 40 CFR, Part 260-265.

- H. Protection of Water Resources:** The Contractor shall keep construction activities under surveillance, management, and control to avoid pollution of surface and ground waters. Special management techniques shall be implemented to control water pollution resulting from the construction activities, which are included in this contract.
- I. Protection of Fish and Wildlife Resources:** The Contractor shall keep construction activities under surveillance, management and control to minimize interference with, disturbance to, and damage of fish and wildlife.
- J. Protection of Air Resources:** The Contractor shall keep construction activities under surveillance, management, and control to minimize pollution of air resources. All activities, equipment, processes, and work operated or performed by the Contractor in accomplishing the specified construction shall be in strict accordance with the Commonwealth of Massachusetts and all Federal emission and performance laws and standards. Ambient Air Quality Standards set by the Environmental Protection Agency, specifically as they apply in the Commonwealth of Massachusetts shall be maintained for all construction operations and activities.
- K. Particulates:** Dust particles, aerosols, and gaseous by-products from all construction activities, processing and preparation of materials shall be controlled at all times, including weekends, holidays and hours when work is not in progress.
- L. Hydrocarbons and Carbon Monoxide:** Hydrocarbons and carbon monoxide emissions from equipment shall be controlled to Federal and Massachusetts allowable limits at all times.
- M. Odors:** Odors shall be controlled at all times for all construction activities, processing and preparation of materials.
- N. Protection of Sound Intrusions:** The Contractor shall keep construction activities under surveillance, and control to minimize damage to the environment by noise. The Contractor shall use methods and devices to control noise emitted by equipment.
- O. Ownership of any fuel on the project site at all times will be under the control of the Contractor.** The Contractor will contact, coordinate and comply with any local, county, state or federally mandated regulations, codes or rules set forth regarding the storage, use and or disposition of any petroleum products. Under no circumstances are any permanent fuel facilities to be constructed on the project site. Any fuel spills shall be the sole responsibility of the Contractor.
- P. Water Quality:** The Contractor is solely responsible for meeting all local, state and federal regulations and conditions set forth in the Contract specifications and permits.

- Q.** Environmental Window: Contractor shall adhere to all environmental windows according to permits. Dredging activities are prohibited from January 15th to October 3rd of any year.

3.03 POST CONSTRUCTION CLEAN UP

- A.** The Contractor shall clean up all areas affected by construction to pre-construction conditions prior to completion of project.

3.04 RESTORATION OF LANDSCAPE DAMAGE

- A.** The Contractor shall restore all landscape features of staging, storing or other areas damaged or destroyed during construction operations outside the limits of the approved work areas. Such restorations shall be in accordance with the plan submitted for the approval of the Project Engineer. This work will be accomplished at the Contractor's expense.

3.05 MAINTENANCE OF POLLUTION CONTROL FACILITIES

- A.** The Contractor shall maintain all constructed facilities and portable pollution control devices for the duration of the contract or for that length of time construction activities create the particular pollutants.

3.06 TRAINING OF CONTRACTOR PERSONNEL

- A.** The Contractor shall train his personnel in all phases of environmental protection. The training shall include methods of detecting and avoiding pollution, familiarization with pollution standards, both statutory and contractual, and installation and care of facilities to ensure adequate and continuous environmental pollution control.

***** END OF SECTION *****

**POLPIS HARBOR MAINTENANCE DREDGING
NANTUCKET, MA**

**SECTION 01700
GENERAL SAFETY REQUIREMENTS**

PART 1: GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Special Conditions and Technical Specifications sections, apply to this Section.

1.02 SUMMARY

- A. The work covered in this section consists of furnishing all plant, labor, equipment and appliances in performing all operations in connection with safety of persons and property during construction. The safety requirements specified in this section are in addition to those contained in the sections pertaining to the specific items of work involved or indicated on the drawings. Where there is a conflict between the requirements of this section and sections pertaining to the specific items of work, the requirements of this section shall govern. Specific requirements of this section include:

- The Contractor shall comply with all aspects of the Safety and Environmental Policies as applicable to each facility/site.
- The Contractor shall provide safety controls for protection of persons and property in compliance with all applicable Federal, State and Municipal statutes and/or regulations.
- The Contractor shall maintain accurate records and report to the Project Engineer exposure data and all accidents.
- The Contractor shall promptly correct noncompliance with safety provisions where they are observed or when notified.
- The Contractor shall develop a safety program and submit bids for effective accident prevention.
- The Contractor shall attend project meetings relative to administration of the overall safety program.

1.03 REFERENCES

- A. The most recent editions of the following publications listed below form a part of this specification to the extent referenced.

1. U.S. Army Corps of Engineers Manual (EM): Safety and Health Requirements Manual, EM 385-1-1
2. ASME International B30.5 (2004) Mobile Crane
3. ASME International B30.22 (2003) Articulating Boom Cranes
4. U.S. National Archives and Records Administration (NARA) 29 CFR 1910.94 Ventilation
5. U.S. National Archives and Records Administration (NARA) 29 CFR 1910.120 Hazardous Operations and Emergency Response
6. U.S. National Archives and Records Administration (NARA) 29 CFR 1926.65 Hazardous Operations and Emergency Response
7. U.S. National Archives and Records Administration (NARA) 29 CFR 1926.502 (f) Warning Line Systems
8. National Fire Protection Association (NFPA) 10 (1995) Portable Fire Extinguishers
9. NFPA 241 (1996) Safeguarding Construction, Alteration, and Demolition Operations
10. Occupational Safety and Health Act (OSHA)

PART 2: PRODUCTS

NOT USED

PART 3: EXECUTION

3.01 GENERAL SAFETY REQUIREMENTS - U.S. ARMY CORPS OF OWNER'S ENGINEERS MANUAL

- A. The Contractor shall comply with all pertinent provisions of the Corps of Engineers Manual, EM 385-1-1, and (most recent edition).
- B. The Contractor shall submit crane inspection reports as required in accordance with EM 385-1-1 with Daily Reports.

3.02 HOT WORK

- A. No Hot Work (burning, welding, chipping, grinding, and electrical power tools) is allowed within 350 feet of a transfer operation.

3.03 ACCIDENT PREVENTION

- A. The Contractor shall comply with the Massachusetts Occupational Safety and Health Act, and will also take, or cause to be taken, such additional measures as may be necessary for the prevention of accidents.
- B. Prior to commencement of Work the Contractor shall (1) submit proposals in writing for effectuating provisions for accident prevention, and (2) meet in

conference with the Project Engineer to discuss and develop mutual understandings relative to administration of an overall safety program.

- C.** During the performance of Work under the Contract, the Contractor shall institute controls and procedures for the control and safety of persons visiting the job site.
- D.** The Contractor shall maintain an accurate record of, and shall report to the Project Engineer in writing, exposure data and all accidents resulting in death, traumatic injury, occupational disease, or damage to property, materials, supplies, or equipment incident to Work performed under the Contract.
- E.** The Project Engineer will notify the Contractor of any noncompliance with the foregoing provisions. The Contractor shall, after receipt of such notice, immediately take corrective action. If the Contractor fails or refuses to comply immediately, the matter will be referred to the proper authority. No part of the time lost due to any stop order issued by proper authority shall be made the subject or claim for extension of time or for extra costs or damages by the Contractor.
- F.** Compliance with the provisions of this Part by Subcontractors will be the responsibility of the Contractor.

3.04 CONTRACTOR'S SAFETY PROGRAM

- A.** The Contractor shall have a written safety program in place for this project. At a minimum, it shall include a drug and alcohol policy, accident reporting criteria and example forms along with an agenda for daily safety meetings safe operations practices for all trades associated in this project.
- B.** A safety officer shall be appointed by an officer of the Contractor's Corporation shall be named and charged with any and all safety activities relating the this project.
- C.** The Project Engineer shall not be responsible for implementing and/or providing any safety training and/or direction regarding the Contractor's operations as they relate to the project's safety.
- D.** Accident Prevention Program: Within five (5) calendar days after receipt of Notice to Proceed the Contractor shall furnish his Accident Prevention Program as part of the Project Health and Safety Plan to the Project Engineer for review and approval. The program shall be prepared in the following format:
 - 1. Administrative Plan
 - 2. Job Hazard Analysis
 - 3. A copy of company policy statement of accident prevention and any other guidance statements normally provided new employees.

4. When marine plant and equipment are in use the Contractor shall assure that oil transfer operations to or from his plant comply with all Federal, State, county, and Municipal laws, codes and regulations. Particular attention is invited to 33 CFR Subchapter 0, Pollution. The Contractor shall incorporate in his accident prevention program, sufficient information to demonstrate that all fuel transfers will be made in accordance with 33 CFR 156 and any other applicable laws, codes and regulations. (CENABEN 1984 APR)
5. The Contractor shall not commence physical work at the project site until the program has been received and acknowledged by the Owner or their authorized representative. As an additional measure to implementation of the Accident Prevention Program, the Contractor shall meet with Owner and/or Project Engineer as soon as practicable after receipt of Notice to Proceed and before start of work to discuss and develop a mutual understanding relative to administration of the overall safety program. Minutes of the meeting shall be prepared, signed by the Contractor and the Owner or their authorized representative. At the Project Engineer's discretion, the Contractor may submit his Job Hazard Analysis only for the phases of construction. All remaining phases shall be submitted and accepted prior to the beginning of work in each phase. EM 385-1-1, Section 1.

3.05 ACCIDENT INVESTIGATION AND REPORTING

- A. Accidents shall be investigated by immediate supervisor of the employee(s) involved and reported to the Project Engineer within one working day after the accident. Paragraph 01.D, EM 385-1-1.
- B. The Contractor shall insure that all accidents which involve loss of life, occupational disease of the employee, injury incapacitating any person for normal work beyond the day of injury, or damage to property, materials, supplies, or equipment, of \$1,000.00 or more, and which relate to the dredge, any attendant plant, the dredge and sediment transfer/hauling area and disposal areas, shall be recorded, investigated, and reported to the Owner or their authorized representative.
- C. Each accident shall be verbally reported to the Project Engineer at the earliest practicable time, but within 24 hours. Each accident involving loss of life or traumatic injury to any person shall be reported to the Project Engineer verbally, telephonically, or by radio immediately.
- D. The Contractor shall promptly investigate each accident and submit a written, signed report on ENG Form 3394 or other approved form to the Project Engineer within 48 hours.
- E. A factual record of each accident shall be entered in the Contractor's official daily log book.

3.06 DAILY INSPECTIONS

- A.** The Contractor shall institute a daily inspection program to assure all safety requirements are being fulfilled. Reports of daily inspections shall be maintained in the Contractor's official daily log book. The reports shall be records of the daily inspections and resulting actions. Each report shall include, as a minimum, the following:
1. Phase(s) of construction underway during the inspection.
 2. Locations of areas inspections were made.
 3. Results of inspection, including nature of deficiencies observed and corrective actions taken, or to be taken, date, and signature of the person responsible for its contents.

3.07 MEANS OF ESCAPE FOR PERSONNEL QUARTERED OR WORKING ON FLOATING PLANT

- A.** Two means of escape shall be provided for assembly, sleeping, and messing areas on floating plants. For areas involving 10 or more persons, both means of egress shall be through standard size doors opening to different exit routes. Where 9 or fewer persons are involved, one of the means of escape may be a window (minimum dimensions 24-inch by 36-inch), which leads to a different exit route. EM 385-1-1, Section 19.

3.08 CERTIFICATE OF COMPLIANCE

- A.** Contractor shall submit copies of all applicable inspections and certifications for all floating plant and equipment.

3.09 EMERGENCY ALARMS AND SIGNALS

- A.** Alarms. Emergency alarms shall be installed and maintained on all floating plant requiring a crew where it is possible for either a passenger or crewman to be out of sight or hearing from any other person. The alarm system shall be operated from the primary electrical system with standby batteries on trickle charge that will automatically furnish the required energy during an electrical-system failure.

B. Signals

1. Fire Alarm Signals: The general fire alarm signal shall be in accordance with paragraph 97.13-15b of the Coast Guard Rules and Regulations for Cargo and Miscellaneous Vessels, Subchapter I, 1 Sep 77 (CG 257).
2. Abandon Ship Signals: The signal for abandon ship shall be in accordance with paragraph 97.13-15c of referenced cited in (a) above.
3. Man-Overboard Signal: Hail and pass the word to the bridge. All personnel and vessels capable of rendering assistance shall respond.

4. Mooring Lines: Eye loops on mooring lines shall be equipped with brackets or handling ropes to protect the hands of deckhands.

***** END OF SECTION *****

POLPIS HARBOR MAINTENANCE DREDGING

SECTION 02000 SITE PREPARATION AND RESTORATION

PART 1: GENERAL

1.01 RELATED DOCUMENTS

- A.** Drawings and general provisions of the Contract, including Supplemental General and Special Conditions, apply to this Section.

1.02 SUMMARY

- A.** This Section includes the following:
 - 1. Preparation, maintenance and restoration of the sediment handling and transfer area located at Steamship Wharf and as required for transferring dredge material from water to land and into trucks;
 - 2. Temporary sedimentation control(s); and
 - 3. Traffic control and temporary barriers and/or signage.

- B.** Related Sections include the following:
Section 02450, Mechanical Dredging and Upland Disposal

1.03 MATERIAL OWNERSHIP

- A.** Except for materials indicated to remain Owner's property, materials shall become Contractor's property and shall be removed from Project site.

1.04 SUBMITTALS

- A.** As part of the Contractor's Work Plan submittal, he/she shall include details that describe the proposed means/methods that will be used for the transfer of dredge material from water to land for placement into trucks as required for the transporting of sediments to the designated upland disposal (stockpile) area which shall include, but not be limited, description of equipment to be utilized, how operations will be performed at Steamship Wharf, the means/methods that will be used to protect existing water resources and land areas from sedimentation and discharge of any soil-bearing water runoff during transfer operations.

1.05 QUALITY ASSURANCE

- A.** Regulatory Requirements:
 - 1. Provide temporary sediment control system(s) as required at the sediment handling and transfer area to protect working and adjacent land areas and water resources from sedimentation during the handling/transfer of sediments from land to water and into trucks for hauling to the designated upland disposal (stockpile) area.

1.06 PROJECT CONDITIONS

- A. Traffic:** Avoid and minimize interference with daily operations at Steamship Wharf, adjoining roads, streets, walks, and other adjacent occupied or used facilities during site preparation, use and restoration operations.
 - 1. Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction.
 - 2. Provide alternate routes around closed or obstructed traffic ways if required by authorities having jurisdiction.
- B. Salvable Materials:** Carefully remove all materials to be re-installed and store on Owner's premises as directed.
- C. Utility Locator Service:** Notify utility locator service for area where Project is located before site preparation.
- D. Do not commence dredging operations until temporary sedimentation control measures are in place to the satisfaction of the Owner and Project Engineer.**

PART 2: PRODUCTS

NOT USED

PART 3: EXECUTION

3.01 PREPARATION

- A. Protect and maintain benchmarks and survey control points from disturbance during construction.**
 - 1. Protect area prepared for sediment handling and transfer from damage during construction. The Contractor will be responsible for restoring any/all damaged areas to their original condition, as acceptable to Owner.

3.02 TEMPORARY SEDIMENTATION CONTROL

- A. Provide temporary sedimentation control measures to prevent dredge material that is transferred from water to land and into trucks from impacting existing structures, walkways, occupied and surrounding land and water areas, adjacent/surrounding properties from any discharge of any sediment, soil-bearing water runoff or airborne dust.**
- B. The Contractor shall prevent sediment run-off into existing catch basins that may be located within the vicinity of the Steamship Wharf area. Catch basin silt screens shall be utilized by the Contractor to prevent sediment run-off. The Town will perform pre- and post-construction inspection of catch basins to determine if sedimentation run-off has occurred as a result of sediment handling operations. The Contractor will be responsible for cleaning out catch basins should the Town's inspection prove it necessary.**

- C. Inspect, repair, and maintain sedimentation control measures through the duration of construction.
- D. Remove sedimentation controls and restore all areas disturbed during construction.

3.03 SITE PREPARATION, MANAGEMENT AND RESTORATION

A. Sediment Handling and Transfer Area

1. Reference is made to the Contract Drawings for the area available to off-load sediments from water to land.
2. Protect and restore any existing walkways, paved areas, drainage/utilities and any/all other areas impacted by sediment handling and transfer operations. Install required temporary barriers/signage as required to clearly identify work area.
3. Provide any/all traffic control measures required to ensure that the work area is secured from public access and that there is no interference with daily operations.
4. Work under this item shall include, but not limited to, installation, maintenance and removal of sedimentation controls. Cleaning and maintenance of work area(s) and equipment, including sweeping and/or other appropriate measures to ensure that any/all dredge sediments that have spilled during the transfer from water to land and into trucks are properly cleaned up, the protection/restoration of work areas and any adjacent areas impacted during construction.

3.04 DISPOSAL

- A. Disposal: Remove surplus materials, pavement, demolished materials, and waste materials including trash and debris, and legally dispose of them off Owner's property.
- B. Separate recyclable materials produced during site clearing from other non-recyclable materials. Store or stockpile without intermixing with other materials and transport them to recycling facilities.

***** END OF SECTION ****

**POLIS HARBOR MAINTENANCE DREDGING
NANTUCKET, MA**

**SECTION 02405
MECHANICAL DREDGING & UPLAND DISPOSAL**

PART 1: GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Special Conditions and Technical Specifications sections, apply to this Section.

1.02 SUMMARY OF WORK

- A. The work includes labor, materials, equipment and services required for completion of the work under this Section; all as shown on the drawings and as specified herein.
1. Equipment mobilization;
 2. Perform dredging using mechanical methods;
 3. Sediment handling/transfer from water to land at Steamship Wharf;
 4. Trucking sediments to designated upland disposal (stockpile) area;
 5. Site preparation, management and restoration of designated upland (stockpile) area; and
 6. Equipment demobilization.
- B. This Section includes all water control, manpower, fueling, maintenance, operation, positioning systems, progress/verification surveys, engineering, environmental protection, and all other work incidental to the dredging and disposal operations required to perform/complete the project.
- C. Based upon review of available record documents, the material to be removed to establish the depth within the channel limits shown on the Contract Drawings consists of maintenance dredging. In general, sediments are anticipated to primarily consist of sand. Minor variations in the subsurface materials are to be expected and, if encountered, shall not be considered as being materially different. Bidders are expected to examine the site of the work along with the sediment grain size data provided in **Attachment C** and decide for themselves the character of the materials.

- D. The depths that are sought within the Polpis Harbor Entrance Channel will require a dredge depth of six feet below Mean Low Water (-6.0 feet MLW) and a one (1) foot allowable over dredge (-7.0 feet MLW) as noted on the Contract Drawings. It is estimated that a total of $\pm 10,885$ CY of sediment will be dredged, including the allowable overdredge depth and sideslopes. No payment will be made for any material removed from a depth greater than -7.0 feet MLW as stated above in these areas or beyond the sideslopes shown on the Contract Drawings. **Payment will be deducted for the transportation/disposal of the sediment volume removed below the allowable overdredge depth and beyond the limits of the dredge prism as shown on the Contract Drawings.**
- E. The above stated quantity shall only be considered an estimate. The actual amount removed will be dependent on the amount of material the Contractor removes to the payment limit from within the established dredge areas as shown on the Contract Drawings.

1.03 QUALITY ASSURANCE - CONTRACTOR QUALITY CONTROL

- A. Contractor Quality Control is the means by which the Contractor verifies that his construction/dredging work complies with the requirements of the contract specifications. Contractor Quality Control shall be adequate to cover all construction, including dredging and disposal operations.
- B. General: The Contractor shall provide and maintain an effective quality control program. The Contractor's Quality Control Program through inspection, testing, equipment/system operation, and reporting shall demonstrate and document the extent of compliance of all work with the standards and quality established by the contract documents. Inspection and test reports shall make reference to specific drawing and/or specification requirements and shall state inspection/test procedures with both expected and actual results. The burden-of-proof of contract compliance is placed on the Contractor and not assumed by the Project Engineer. The Contractor's Quality Control will not be accepted without question.
- C. Quality Control Plan: Within seven (7) calendar days after receipt of Notice to Proceed the Contractor shall furnish his Quality Control Plan to the Project Engineer for review and approval. The plan shall cover in detail each feature of the project including dredging and disposal operations. Copies of the Quality Control Plan shall be made available on the dredge. The Quality Control Plan the Contractor proposes to implement shall identify the personnel, procedures, instructions, records, and forms, and as a minimum, shall include:
1. A description of the quality management organization.
 2. The number, classifications, qualifications, duties, responsibilities and authorities of personnel. A copy of the letter signed by an authorized official

of the firm, which describes the responsibilities and delegates the authorities of the system manager, shall be furnished.

3. Procedures for processing reports, samples and other submittals.
 4. Quality control activities to be performed, including those of subcontractors.
 5. Compliance inspections recorded on a Daily Quality Control Report and the Dredging Report. Construction or dredging will be permitted to begin only after approval of the Quality Control Plan, or approval of that portion of the plan applicable to the particular feature of work to be started. As an additional measure to the implementation of the Quality Control Plan, the Contractor shall meet with representatives of the Owner as soon as practicable after receipt of Notice to Proceed and before start of construction or dredging to discuss the Contractor's quality control system. The meeting shall develop a mutual understanding relative to details of his Quality Control Program including the forms for recording the quality control operations; control activities, testing, administration of the system for both onsite and offsite, and the interrelationship of Contractor and Project Engineer's control and surveillance. Minutes of the meeting shall be prepared, signed by both the Contractor and the Owner or their authorized representative and shall become a part of the contract file. There may also be occasions when subsequent conferences will be called to reconfirm understandings.
- D. Notification of Changes:** After approval of the Quality Control Plan, the Contractor shall notify the Project Engineer in writing of any proposed change.
- E. Work Deficiencies:** The Contractor shall not build upon or conceal any work containing uncorrected defects. If deficiencies indicate that the Contractor's quality control system is not adequate or does not produce the desired results, corrective actions in both the quality control system and the work shall be taken by the Contractor. If the Contractor does not promptly make the necessary corrections, the Project Engineer may issue an order stopping all or any part of the work until satisfactory corrective action has been taken. Payment for deficient work will be withheld until work has been satisfactorily corrected. If the above does not obtain effective improvement in the Contractor's quality control system, the Project Engineer may direct changes be made in the quality control system and/or organization, including but not limited to, the removal and replacement of unsatisfactory quality control representatives at any level or the addition of quality control personnel or services. Any additional cost to the Owner for providing quality control services that are not satisfactorily performed by the Contractor will be deducted from payment due the Contractor. If recurring deficiencies in an item or items indicate that the quality control system is not adequate, such corrective actions shall be taken as directed by the Project Engineer.

F. Quality Control Organization:

1. System Manager: The Contractor shall identify an individual within his organization at the site of the work, who shall be responsible for overall management and have the authority to act in all Contractor quality control matters for the Contractor.
2. Personnel: Staff shall be maintained under the direction of the system manager to perform all quality control activities. The actual strength of the staff during any specific work period may vary to cover work phase needs, shifts, and rates of dredging. The personnel of this staff shall be fully qualified by experience and technically trained to perform their assigned responsibilities.

G. Control: The Contractor's quality control system shall include at least the following three phases of control and management for definable features of work:

1. Preparatory: Twenty-four (24) hours in advance of beginning any definable features of work, the Contractor's quality control manager shall review with the Project Engineer the applicable provisions of the specifications and Quality Control Plan and confirm the methods to assure compliance.
2. Initial: This phase of control must be accomplished at the time of arrival to the disposal area and dredging personnel on site to accomplish a definable feature of work and at any time new workmen or crews arrive for assignment to the work. The Contractor's control system must permit the transfer of information on quality requirements specified in this contract to each workman before he starts, demonstration from each workman that he can provide the specified quality of work, and motivate him to continue. It is also during this phase that control testing to prove the adequacy of the Contractor's control procedures shall be initiated and verified. The Project Engineer shall be notified at least 24 hours in advance of each initial activity.
3. Follow-up: The follow-up phase shall be performed continuously to verify that control procedures are providing an end product which complied with contract requirements. Adjustments to control procedures may be required based upon the results of this phase and compliance inspections.

H. Completion: At the completion of the work, the Contractor's quality control representative shall conduct a joint completion review with the Project Engineer. During this review the work shall be examined, quality control shall be reviewed, and a list shall be developed of work not properly completed or not conforming to plans and specifications. This list shall be included in the quality control

documentation with an estimated date for correction of each deficiency. The Contractor shall make sure that deficiencies have been corrected prior to the specified completion date. Payment will be withheld for defective or deficient features until they are satisfactorily corrected.

I. Quality Control Records: The Contractor shall maintain current records, on an appropriate approved form, of quality control operations, activities, and tests performed including the work of suppliers and subcontractors. These records shall include factual evidence that the required activities or tests have been performed, including but not limited to the following:

1. Type and number of control activities and compliance inspections.
2. Results of control activities or inspections.
3. Nature of defects, causes for rejection, etc.
4. Proposed remedial action.
5. Corrective actions taken.

These records shall cover both conforming and defective or deficient features and shall include a statement that supplies and materials incorporated in the work comply with the contract. The Contractor shall submit legible, daily quality control reports to the Project Engineer on the day following the report period. The records shall cover disposal activities and dredging performed during the time period for which the records are furnished. These records shall be verified by person so designated by the Contractor. Failure to follow these procedures will be considered a breach of the Quality Control Program and portions of the progress payment may be withheld until it is demonstrated by the Contractor that the construction activities covered by the delinquent reports meet the requirements of the plans and specifications.

1.04 PROJECT CONDITIONS

- A.** Information and data furnished or referred to below are furnished for information only and it is expressly understood that the Owner will not be responsible for any interpretations or conclusions drawn therefore by the Contractor.
- B.** Weather Conditions: Complete weather records and reports may be obtained from the U.S. Weather Bureau. The Contractor shall satisfy himself as to the hazards likely to arise from weather conditions during the construction period. A portion of the site of work is exposed, and suspension of work may at times be necessary during extreme storm periods. Tidal currents are not expected to have an adverse effect on dredging operations; however, the project site includes harbor areas that may be prone to freezing and ice build-up during the winter months.
- C.** Transportation Facilities: The Contractor shall make his own investigation of existing transportation facilities located within the vicinity of the work.

- D. Conditions of Dredge Areas:** The best information available as to the present conditions of the project site is shown on the Contract Drawings, described by the specifications provided herein and based upon sediment grain size data provided in **Attachment C**.
- E. Utilities:** The Contractor shall coordinate with the local utility companies for locations of underwater utility cables which could obstruct dredging operations and any utilities that may interfere with sediment handling/transfer operations at the Steamship Wharf.
- F. Anticipated Debris/Obstructions within Dredge Areas:** The Contractor shall assume that miscellaneous debris may be encountered as this site supports local commercial fishing and moorings. The Contractor shall report any possible obstructions to the Project Engineer for instruction prior to starting work.
- G. The proposed dredging material encountered is believed to consist primarily of sand.** Some of the dredging within previously dredged areas may be "similar to new dredging" as this can occur when previous dredging projects missed areas, caused irregular shapes on the bottom, used an inadequate survey for project limits or other such causes. Minor variations in subsurface materials are to be expected and, if encountered, shall not be considered as being materially different. Bidders are expected to examine the site of the work and decide for themselves the character of the material. The Contractor is required to remove all materials within the areas shown on the Contract Drawings.
- H. Hours of Operation:** It is anticipated that dredging operations will be dependent on tides; therefore, dredging will be allowed 24 hours per day, seven (7) days per week, excluding holidays, for the entire specified construction period. The Contractor will be responsible for coordinating with the Steamship Authority, (Elaine Mooney, Nantucket Terminal Manager at (508) 548-5011 ext. 259) to determine available times for the off-loading of dredge sediments at the Steamship Wharf. Off-loading operations will be limited to the hours of 7:00 AM and 10:00 PM and must accommodate daily operations of the Steamship Authority.
- I. Vessel Traffic:** The project includes performing work within active/working harbor areas. The Contractor shall be responsible for coordinating with the Project Engineer, Harbormaster and Owner to determine site access relative to uses/daily needs and shall be responsible for moving the dredge barge and/or scow(s) from project areas if so required. In addition, the areas are also subject to traffic from commercial boats, recreational craft, etc. and may cause minor delays to the contractor operations. No additional compensation shall be made for any required moves or minor delays.
- J. Obstruction of Channel:** There will be no efforts made to keep channels free from vessels or other obstructions, except to the extent of such regulations, if any, as may be prescribed by the Secretary of the Army, in accordance with the provisions of

Section 7 of the River and Harbor Act approved 8 August 1917. The Contractor shall be required to conduct the work in such manner as to obstruct navigation as little as possible, and in case the Contractor's operations so obstructs the channel as to make difficult or endanger the passage of vessels, said equipment shall be promptly moved on the approach of any vessels to such an extent as may be necessary to afford a safe practicable passage. Upon completion of the work, the Contractor shall promptly remove his equipment, including ranges, buoys, piles, and other marks placed by him under the contract in navigable waters or on-shore.

- K. Navigation Aids:** The Contractor shall not relocate or move any aids to navigation that have been established by the U.S. Coast Guard (USCG). If it becomes necessary to have any aid to navigation moved by the Contractor in order to complete dredging operations under this contract, the Contractor shall notify the Commander AON, Office of Aids to Navigation, in writing with a copy to the Project Engineer not less than 30 days prior to such need for movement. The Contractor shall notify the USCGS of the approximate time the navigation aid may be relocated to its original position.
- L. Notice To Mariners:** Should the Contractor, during dredging operations, encounter any objects on the channel bottom which could be a hazard to navigation, he/she shall immediately notify Project Engineer as to the location of said object and any other pertinent information necessary for the Project Engineer to put out a Notice to Mariners.
- M. Bridge-to-Bridge Radio Communication:** The Contractor is required to monitor both channels 13 and 16.
- N. Channel 13:** The master, operator, or designated pilot of the vessel must maintain a listening watch on the designated bridge-to-bridge frequency while underway on the navigable waters of the United States. The designated frequency is VHF-FM Channel 13. The person maintaining the watch also must be able to communicate in English.
- O. Channel 16:** In addition to the Channel 13 watch, vessels must keep a continuous watch on VHF-FM Channel 16 (International Distress and Calling Channel) while underway, except when transmitting or receiving traffic on other VHF-FM channels (e.g., vessels may switch to other channels to pass traffic, listen to weather reports, etc.) or when participating in and monitoring a VTS channel. While not required to have a VHF-FM radio onboard (Voluntary Ship Stations), vessels not subject to the bridge-to-bridge regulations must maintain a watch on Channel 16 whenever the radio, if onboard, is operating (i.e., energized) and is not being used to communicate on other channels.
- P. Notification of the USCG:** Prior to commencement of work on this contract, the Contractor shall notify the USCG Commander, First District of his intended operations to dredge and request that it be published in the Local Notice to

Mariners. This notification must be given in sufficient time so that it appears in the Notice to Mariners at least one week prior to the commencement of this dredging operation.

- Q. Proximity of Existing Shoreline Structures to Dredge Areas:** The Contractor is made aware of existing shoreline structures that directly abut or are close proximity to the dredge area as shown on the Contract Drawings. The Contractor shall take extreme care when dredging within/in close proximity of these areas. The Contractor's work plan shall include a detailed description of the means/methods that will be utilized to protect the integrity of existing structures.

1.05 SURVEY BENCH MARKS, LINES AND GRADES

- A.** The Contractor shall employ, with the Contract Price, a competent Professional Engineer or Surveyor licensed in Massachusetts and may also be an A.C.S.M. Certified Hydrographer who has a minimum of 5-years experience in hydrographic survey to perform work. In addition, Quality Control surveys, and dredge positioning system installation and setup shall be performed by an individual with at least five (5) years experience in automated hydrographic surveys and dredge positioning.
- B.** The Contractor shall be responsible for the layout of his work. The Project Engineer will furnish the coordinates of the dredge footprint. The Project Engineer will furnish the coordinates and the monument descriptions of existing horizontal and vertical control available within the project area. Should the existing control provided by the Project Engineer be deemed inadequate by the Contractor to perform operations, he/she will be responsible for establishing additional control, and this work shall be performed by a Professional Land Surveyor (PLS) licensed in the State of Massachusetts and having a minimum of five (5) years experience. The Contractor shall be responsible, by utilizing this data, to dredge within the dredging prisms that are shown on the Contract Drawings. The Contractor shall maintain, preserve, repair or replace, at his own expense, any gages or location markers that are lost, damaged or destroyed for any reason subsequent to their initial establishment until authorized to remove them. The Contractor may, at his option, establish offset stakes, back-up stakes, and gages to be utilized in re-establishing any baseline, ranges and gages that are lost, damaged or destroyed. The contract completion time will not be increased due to work delays that result from the failure of the Contractor to maintain, repair or replace the established baselines, ranges and gages.
- C.** Datum and Bench Marks: The plane of reference Mean Lower Water (MLW) shall be used in these specifications for dredging operations. The Contractor shall be responsible for the placement and maintenance of tidal reference points for their tide boards (or electronic gauges) at such a frequency that there will always be an available tidal reference within 500 feet of the dredge and until all dredging has been accepted as complete.

- D. Horizontal and Vertical Control:** Prior to the commencement of work, the Contractor shall submit details of his/her proposed dredge positioning system for the Project Engineer's review. All dredge control and positioning for this project shall be accomplished by means of dredge mounted GPS controlled positioning systems. The Dredge Positioning shall consist of, as a minimum, a Differential GPS positioning system, an on-board computer with MS Windows XP or higher, an azimuth determination system (GPS or electronic compass), a depth sensing device and positioning system software. In lieu of a depth sensing device with depths being displayed in real time, the Contractor may propose use of alternative method(s) provided that he/she can demonstrate that such method(s) will provide adequate control during construction so that required depths are achieved but excess dredging beyond authorized depths/limits is avoided/minimized. The operator shall have a full "heads up" computer monitor display within easy view for control of his work. The software shall be "Dredge Pack" package as manufactured by Hypack, "WinOps" as manufactured by Lyman Burke Associates, or approved equal. Positioning systems shall be Differential GPS with sub-meter accuracy, and one second or less update capability. The Operator's display shall have an outline of the project area and the limits of dredging areas. The dredging areas shall be sectioned into individual cuts which represent the real swing width of the dredge, and shall be stationed at a minimum of 50 foot increments along the direction of dredge travel. The true horizontal position of the dredge bucket shall be visible in real time on the display, and the depth of the bucket shall also be displayed. The on-board computer shall have the ability to store real-time dredge positions – this data shall be made available to the Project Engineer from time to time on CD ROM format as he/she may request from time to time. Available horizontal control data will be provided to the Contractor on request, by the Project Engineer for purposes of preparing his/her layout.
- E.** The Contractor shall have an individual on site at least four (4) hours per day, who has at least five (5) years experience in the set up, operation, calibration and maintenance of on-board marine electronic position systems. This individual shall have a working knowledge of electronic positioning systems, and accepted survey procedures and practices. Prior to the commencement of work, the Contractor shall submit details of his/her proposed dredge positioning system, and the resume of the individual who will be in responsible charge of its setup, operation and maintenance. No dredging work will be allowed to commence until the Contractor's dredge positioning system is approved by the Project Engineer, operational, calibrated and properly functioning. Prior to the commencement of dredging, the Contractor shall demonstrate to the Project Engineer that the positioning system has been properly calibrated, and shall proof all azimuth and offsets by checking against the stationary position of the dredge utilizing conventional land survey methods. Mean horizontal deviation shall be one meter or less, maximum vertical deviation shall be 0.20 feet. If during dredging operations, the system should malfunction, dredging operations shall cease until such a time that the system is repaired and back in proper operation.

1.06 CODES

- A.** Comply with all applicable permits, codes, ordinances, rules, regulations and laws of all local, municipal, and state authorities having jurisdiction over the work, without additional cost to the Owner.

1.07 CONTRACTOR'S RESPONSIBILITY

- A.** The Contractor shall be responsible that his employees strictly comply with all Federal, State, and municipal laws that may apply to operations under the contract; and it is understood and agreed that the Contractor assumes full responsibility for the safety of his employees, plant, and materials, and for any damage or injury done by or to them from any source or cause, except damage caused to the plant or equipment by acts of the Owner, its officers, agents or employees, in which event such damages will be the responsibility of the Owner in accordance with applicable Federal laws. For the purpose of this clause, the terms "officers, agents or employees" of the Owner shall not include persons who are employed by the Contractor and whose services have been furnished to the Owner pursuant to this or any other contract. The Owner will not be responsible for the dredge and attendant plant, any property aboard the dredge and attendant plant, or any accidental damage thereto during the period of the contract. The Contractor shall release the Owner and agents from all responsibility for damages to dock facilities, submerged and aerial crossings, bridges, moored vessels, or other damages ordinarily covered by fire and marine insurance.
 - 1. Warranty: The Contractor warrants to the Owner the quiet and peaceable use of the aforesaid property, and in case of any disturbance, by suit or otherwise, will defend the same free of charge to the Owner in or before the proper State or United States courts.
 - 2. Delays: If the Contractor refuses or fails to make delivery of the project within the time specified or any extension thereof, as provided in specifications, or to maintain the property in serviceable condition and diligently and competently to conduct the specified operations, the Owner may, by written notice terminate the right of the Contractor to proceed with delivery or with further performance under the contract or such parts or parts thereof affected by the contract or otherwise and the Contractor shall be liable to the Owner for any excess cost occasioned thereby.
 - 3. Disclaimer: The Contractor shall hold and save harmless the Owner, agents and employees, from all claims that may arise resulting from the Contractor's negligence in connection with the work to be performed under the contract, or from noncompliance by the Contractor with the provisions of the contract, Contract Drawings, and specifications and/or the instructions of the Project Engineer.

PART 2: PRODUCTS

2.01 MECHANICAL DREDGE

- A.** Dredge shall be equipped with a closed environmental bucket.
- B.** A physical barricade must be positioned to prevent personnel from entering the counterweight swing (tail swing) area of the dredge.
- C.** A substantial and durable rating chart containing legible letters and figures shall be provided with each dredge and securely mounted onto the dredge cab in a location allowing easy reading by the operator while seated in the control station.
- D.** Certification records, which include the date of inspection, signature of the person performing the inspection, and the serial number or other identifier of the dredge that was inspected shall always be available for review by Contracting Officer personnel.
- E.** Written reports listing the load test procedures used along with any repairs or alterations performed on the dredge shall be available for review by Contracting Officer personnel.
- F.** The Contractor shall certify that all dredge operators have been trained in proper use of all safety devices.

2.02 DREDGING PLANT

- A.** All dredging under this contract shall be performed using a mechanical type dredge with a closed environmental bucket. If a silt curtain is used to minimize turbidity, it shall be bottom-weighted and of suitable material/grade appropriate with the velocity of the current at the site and be placed at a location that does not bottom out during low tide.
- B.** Contractor shall demonstrate that the dredge operator has sufficient control over bucket depth in the water and bucket closure so that sediment re-suspension from bucket contact with the bottom and due to bucket over-filling can be minimized.
- C.** The plant and equipment list submitted with the Contractor's Proposal shall be the minimum which the Contractor shall place and keep on the job unless otherwise determined by the Project Engineer. The listing of plant and equipment is not to be construed as an agreement on the part of the Owner or the Project Engineer that the equipment is adequate to perform the work.
- D.** Plant and equipment employed on the work shall be in satisfactory operating condition and capable of safely and efficiently performing the work under exposed environmental conditions and as set forth in the specification and shall be subject to inspection by the Project Engineer at all times. No reduction in the capacity of

the plant employed on the work shall be made except by written permission of the Project Engineer. The measure of the "Capacity of Plant" shall be its actual performance on the work to which these specifications apply.

2.03 CRANES

A. Cranes must be equipped with:

1. Load indicating devices (LIDs) and a boom angle or radius indicator, or load moment indicating devices (LMIs). Anti-two block prevention devices.
2. Boom hoist hydraulic relief valve, disconnect, or shutoff (stops hoist when boom reaches a predetermined high angle).
3. Boom length indicator (for telescoping booms).
4. Device to prevent uncontrolled lowering of a telescoping hydraulic boom.
5. Device to prevent uncontrolled retraction of a telescoping hydraulic boom.
6. If the crane system to be utilized by the Contractor does not include the aforementioned devices identified under items 1 and 2 above, he/she shall provide the appropriate documentation, inspection(s) and certification(s) to the Project Engineer as required to fully demonstrate that his/her equipment is capable of being operated safely and that all applicable OSHA and industry safety standards will be met.

B. The Contractor shall notify the Contracting Officer 15 days in advance of any cranes entering the activity so that necessary quality assurance spot checks can be coordinated. Contractor's operator shall remain with the crane during the spot check.

C. The Contractor shall comply with the crane manufacturer's specifications and limitations for erection and operation of cranes and hoists used in support of the work. Erection shall be performed under the supervision of a designated person (as defined in ASME B30.5). All testing shall be performed in accordance with the manufacturer's recommended procedures.

D. The Contractor shall comply with ASME B30.5 for mobile and locomotive cranes, ASME B30.22 for articulating boom cranes and ASME B30.8 for floating cranes and floating derricks.

E. The presence of the Owner or Project Engineer does not relieve the Contractor of an obligation to comply with all applicable safety regulations. The Government will investigate all complaints of unsafe or unhealthful working conditions received in writing from contractor employees, federal civilian employees, or military personnel.

- F.** Each load shall be rigged/attached independently to the hook/master-link in such a fashion that the load cannot slide or otherwise become detached. Christmas-tree lifting (multiple rigged materials) is not allowed.
- G.** Under no circumstance shall a Contractor make a lift at or above 90% of the cranes rated capacity in any configuration.
- H.** When operating in the vicinity of overhead transmission lines, operators and riggers shall be alert to this special hazard and shall follow the requirements of USACE EM 385-1-1 section 11 and ASME B30.5 or ASME B30.22 (latest editions) as applicable.
- I.** Crane suspended personnel work platforms (baskets) shall not be used unless the Contractor proves that using any other access to the work location would provide a greater hazard to the workers or is impossible. Personnel shall not be lifted with a line hoist or friction crane.
- J.** A fire extinguisher having a minimum rating of 10BC and a minimum nominal capacity of 5lb of extinguishing agent shall be available at all operator stations or crane cabs. Portable fire extinguishers shall be inspected, maintained, and recharged as specified in NFPA 10, Standard for Portable Fire Extinguishers.
- K.** All employees shall be kept clear of loads about to be lifted and of suspended loads.
- L.** A weight handling equipment operator shall not leave his position at the controls while a load is suspended.
- M.** Only Contractor crane operators who have met the requirements of 29 CFR 1910.94, 29 CFR 1910.120, 29 CFR 1926.65, 29 CFR 1926.500, USACE EM 385-1-1, ASME B30.5, and ASME B30.22 and other local and state requirements shall be authorized to operate the crane.
- N.** The Contractor shall use cribbing when performing lifts on outriggers.
- O.** The crane hook/block must be positioned directly over the load. Side loading of the crane is prohibited.
- P.** A physical barricade must be positioned to prevent personnel from entering the counterweight swing (tail swing) area of the crane.
- Q.** A substantial and durable rating chart containing legible letters and figures shall be provided with each crane and securely mounted onto the crane cab in a location allowing easy reading by the operator while seated in the control station.

- R.** Certification records, which include the date of inspection, signature of the person performing the inspection, and the serial number or other identifier of the crane that was inspected shall always be available for review by Contracting Officer personnel.
- S.** Written reports listing the load test procedures used along with any repairs or alterations performed on the crane shall be available for review by Contracting Officer personnel.
- T.** The Contractor shall certify that all crane operators have been trained in proper use of all safety devices (e.g. anti-two block devices).

2.04 SCOWS

- A.** Water and dredged material shall not be permitted to overflow or spill out of scows. Failure to repair leaks or change the method of operation which is resulting in overflow or spillage will result in suspension of dredging operations and require prompt repair or change of operation to prevent overflow or spillage as a prerequisite to the resumption of dredging.

PART 3: EXECUTION

3.01 SIGNAL LIGHTS

- A.** The Contractor shall display lights and conduct his operations in accordance with the General Regulations of the USACE and U.S. Coast Guard (USCG) governing lights and day signals to be displayed by towing vessels with tows on which no signals can be displayed, vessels working on wrecks, dredges, and vessels engaged in laying cables or pipe or in submarine or bank protection operations, lights to be displayed on dredge pipe lines, and day signals to be displayed by vessels of more than 65-feet in length moored or anchored in a fairway or channel, and the passing by other vessels of floating plant working in navigable channels, as set forth in Commandant USGS Instruction M16672.2, Navigation Rules: International-Inland (Comdtinst M16672.2), or 33 CFR 81 Appendix A (International) and 33 CFR 84 through 33 CFR 89 (Inland) as applicable. (DAEN-PRP-1984 JUL).

3.02 FUEL USAGE

- A.** The Contractor shall furnish the Project Engineer a report, to be received on or before the last day of the calendar month, listing the totals of fuels consumed by the dredging plant and supporting vessels. The report shall list the quantities of different fuels separately. The report shall cover the period from the 25th of the preceding month to the 25th of the current month. This information may be included in the Contractor's Daily Report of Operations.

3.03 ENVIRONMENTAL LITIGATION: (1974 NOV OCE)

- A. If the performance of all or any part of the work is suspended, delayed, or interrupted due to an order of a court of competent jurisdiction as a result of environmental litigation, as defined below, the Project Engineer, at the request of the Contractor, shall determine whether the order is due in any part to the acts or omissions of the Contractor or a Subcontractor at any tier not required by the terms of this contract. If it is determined that the order is not due in any part to acts or omissions of the Contractor or a Subcontractor at any tier other than as required by the terms of this contract, such suspension, delay, or interruption shall be considered as if ordered by the Project Engineer in the administration of this contract under the terms of the "Suspension Of Work". The period of such suspension, delay or interruption shall be considered unreasonable, and an adjustment shall be made for any increase in the cost of performance of this contract (excluding profit) as provided in that clause, subject to all the provisions thereof.
- B. The term "environmental litigation", as used herein, means a lawsuit alleging that the work will have an adverse effect on the environment or that the Owner has not duly considered, either substantively or procedurally, the effect of the work on the environment.

3.04 LICENSE REQUIREMENTS

- A. Each vessel exceeding twenty six feet in length, excluding sheer, which is used for pushing, hauling alongside, or any other method of towing, and not required by law to have a valid Certificate of Inspection by the USCGS, shall be under the actual direction and control of a person licensed for towing in the geographic area of the work by the USCGS. Licensed persons shall not perform command or other duties in excess of twelve hours in any consecutive twenty-four hour period except in an emergency.

3.05 RADIO COMMUNICATIONS

- A. The Contractor is responsible and required to provide any and all equipment necessary to maintain 24-hour oral communication between the dredge operator, Quality Control System Manager, and the USACE inspector on site. For this purpose, the Contractor shall provide and maintain at his expense a marine band walkie-talkie radio for use by the Project Engineer. The Contractor is responsible for any and all circumstances not conforming to the plans and specifications resulting from the inadequate operation of the equipment.

3.06 CONTINUITY OF WORK

- A. No payment will be made for work done in any area designated by the Project Engineer until the full depth required under the contract is secured in the whole of

such area, unless prevented by ledge rock, nor will payment be made for excavation in any area not adjacent to and in prolongation of areas where full depth has been secured except by decision of the Project Engineer. Should any such nonadjacent area be excavated to full depth during the operations carried on under the contract, payment for all work therein may be deferred until the required depth has been made in the area intervening.

3.07 MISPLACED MATERIAL

- A.** Should the Contractor during the progress of the work, lose, dump, throw overboard, sink, or misplace any material, plant machinery, or appliance, which in the opinion of the Project Engineer may be dangerous to or obstruct navigation, the Contractor shall recover and remove the same with the utmost dispatch. The Contractor shall give immediate notice, with description and location of such obstructions, to the Project Engineer, and when required, shall mark or buoy such obstructions until the same are removed. Should the Contractor refuse, neglect, or delay compliance with the above requirements, such obstructions may be removed by the Owner, and the cost of such removal may be deducted from any money due or to become due to the Contractor, or may be recovered under his bond. The liability of the Contractor of the removal of a vessel wrecked or sunk without fault or negligence shall be limited to that provided in Section 15, 19, and 20 of the River and Harbor Act of March 3, 1899 (33 U.S.C. 410 et seq.).

3.08 SHOALING

- A.** If, before the contract is completed, shoaling occurs in any section previously accepted, including shoaling in the finished dredge area, because of the natural lowering of the side slopes, re-dredging at contract price may be done if agreeable to both the Contractor and the Owner.

3.09 OVERDEPTH AND SIDE SLOPES

- A.** Overdepth: The Contractor shall control and monitor his dredging operations carefully to limit any excess dredging and ensure compliance with environmental permits. A one (1) foot allowable overdredge depth is authorized for dredging at the project site. No payment will be made for any material removed from a depth greater than the authorized overdredge depths within these areas or beyond the sideslopes and as shown on the Contract Drawings.
- B.** Sideslopes: Material actually removed, within limits approved by the Project Engineer, to provide for final sideslopes not flatter than 1 vertical on 3 horizontal, but not in excess of the amount originally lying above this limiting side slope will be estimated and paid for, whether dredged in original position or by dredging space below the pay slope plane at the bottom of the slope for upslope material capable of falling into the cut.

- C. Excessive dredging: Payment will not be made for material taken from beyond the authorized dredge prism and limits as shown on the Contract Drawings. If limits are dredged by the Contractor and determined to be excessive beyond the limits as extended in the provisions of paragraphs A and B, the Owner and/or the Project Engineer reserves the right to deduct this volume from the total amount dredged as excessive overdepth dredging, or excessive side slope dredging for which payment will not be made. Nothing herein shall be construed to prevent payment for the removal of shoals performed in accordance with the applicable provisions of Section 3.08 SHOALING and Section 3.18 FINAL EXAMINATION AND ACCEPTANCE.

3.10 PRE- AND POST-DREDGE SURVEY

- A. Prior to the start of dredging and at the completion of work (or any section thereof), the Owner's Project Engineer will conduct a pre- and post-dredge survey, respectively. These surveys will be used to determine the final payment volume removed and disposed by the Contractor. Dredge volumes will be determined based upon survey lines spaced at a maximum of 25-foot intervals and calculated using Average-End-Method or by the Triangulated Irregular Network (TIN) method as agreed upon by the Contractor and Project Engineer prior to the start of work.
- B. Pre- and Post- Dredge surveys shall be performed using precision equipment accurate to 0.10 feet.

3.11 WORK IN THE VICINITY OF PROTECTED HABITAT, STRUCTURES AND UTILITY CROSSINGS

- A. The Contractor shall exercise caution when working in the vicinity of protected habitat, structures and utility crossings. The Contractor shall constantly monitor operations, and the position of the dredge cut, as well as the natural caving of side slopes. Repair of any damage resulting from excessive or improper excavation in the bottom or side slopes of the dredge cut shall be the responsibility of the Contractor. Where dredging to the required elevation might endanger any structure, the Project Engineer may reduce the required excavation in the vicinity of such structure.
- B. The Contractor shall provide dimensions over all utility crossings as applicable. The Contractor shall submit for approval by the Project Engineer a detailed plan of operation at each pipeline or utility crossing. The plan shall contain emergency measures to be taken in the event of an accident. The Contractor shall notify the Owner(s) of pipelines or utilities at least three (3) calendar days prior to operating within 150 feet of a pipeline or utility. The Owner will not be responsible for any damage to structures or utilities due to the Contractor's deviation from the approved plan.

- C. The Contractor will not be allowed to spud down within any mapped areas of eelgrass as shown on the Contract Drawings.
- D. Any unidentified pipelines or structures, which may be found within the limits of work shall not be disturbed nor shall dredging or the disposal of dredged material be performed at these locations unless, and until, approved by the Project Engineer.
- E. The Contractor shall take extreme care when conducting work around existing structures located within/close proximity of the dredge areas that will not be/cannot be removed. Any damage to existing structures will be at the sole expense of the Contractor.

3.12 SEDIMENT HANDLING & TRANSFER

- A. Sediments to be disposed (stockpiled) at the designated upland area shall be transferred from water to land and into trucks at the designated Sediment Handling and Transfer Area located at Steamship Wharf and as shown on the Contract Drawings.
- B. The Contractor is responsible for installing/utilizing the appropriate sediment control measures to prevent the loss of dredge material when transferring sediments from water to land.
- C. Prior to loading sediments into truck for upland disposal, the Contractor shall demonstrate that sediments have sufficiently dewatered such that no free liquid is observed through performance of the Paint Filter Test (or suitable analogous method approved by MA DEP).

3.13 TRANSPORTING AND UPLAND DISPOSAL

- A. Sediments shall be transported in sealed trucks as necessary to prevent any loss of material/leakage during trucking. Work areas and hauling routes used to transport sediments to the upland disposal (stockpile) area shall be kept clean/free of sediments and swept/cleaned daily (or as required). All trucks tires shall be rinsed clean of dredge sediment as necessary and at the end of each day.
- B. The Contractor shall follow the designated trucking route, as provided in **Attachment D**, when hauling sediments from Steamship Wharf to the designated upland (stockpiling) disposal area.
- C. A MADEP Material Shipping Record and Logs (MSR) shall be completed as required to document that all sediments have been properly transported and stockpiled at the designated upland location(s). Copies of the MSR logs completed by the Contractor shall be provided to the Owner upon completion of trucking operations.

- D. Payment will be deducted for the transportation and disposal of the volume sediment determined to be removed from beyond the dredge template shown on the Contract Drawings as determined from the Owner's post-dredge survey.

3.14 MISPLACED EXCAVATED MATERIAL

- A. Any material that is deposited elsewhere other than in places designated or approved by the Project Engineer will not be paid for and the Contractor may be required to remove such misplaced material and deposit it where directed at his expense. Misplaced excavated material may constitute a violation of applicable Federal, State, and Local statutes, and the Contractor shall be liable for any civil and/or criminal penalties imposed by these statutes.

3.15 WATER QUALITY

- A. The Contractor is responsible for meeting all water quality standards and requirements as stated in the permits issued for the project and in accordance with all local, state and federal regulations throughout the duration of construction operations. Should the Contractor's construction operations result in turbidity levels that do not meet applicable standards/conditions, the Contractor will be required to implement corrective measures.

3.16 RESTORATION OF LANDSCAPE DAMAGE

- A. Any tree, grassed area or other landscape scarred or damaged by the Contractor's equipment shall be restored as nearly as possible to its original condition at the Contractor's expense. The Project Engineer shall determine the methods of restoration to be used.

3.17 NON-COMPLIANCE

- A. The Project Engineer will notify the Contractor in writing of any non-compliance with the foregoing provisions. Such notice, when delivered to the Contractor or his authorized representative at the site of the work, shall be deemed sufficient for the purpose. Within 24 hours after the receipt of such notice, the Contractor shall mail, or personally deliver to the Project Engineer, a complete proposal of the prompt correction of the noncompliance. The Project Engineer will review the proposal and return it to the Contractor approved, subject to such changes or conditions as he finds necessary to assure correction of noncompliance. Immediately upon receipt of such approval, the Contractor shall begin the corrective work and shall carry it to completion. If the Contractor fails or refuses to submit his proposal or to proceed with the corrective work, the Project Engineer may suspend all or any part of the work until satisfactory corrective action has been taken. No part of the time lost due to any such suspension shall be made the subject of a claim for extension of time, nor for excess costs or damages by the Contractor. If so elected, the Project Engineer may cause the corrective work to be accomplished by others, in which event the cost thereof

shall be chargeable against any monies otherwise due the Contractor from the Owner.

3.18 INSPECTION

- A.** Inspection: The work will be conducted under the general direction of the Project Engineer and will be subject to inspection by his appointed inspector(s) to insure strict compliance with the specifications. The Project Engineer will direct the maintenance of the navigation system, gages, ranges, location marks, and limit marks in proper order. Portable lighting shall be provided upon request of the Project Engineer for more detailed inspection of potential trouble areas.
- B.** The Project Engineer will direct suspension of operations at any unit of work where the Contractor upon request does not correct:
 - 1. A safety hazard, which is so grave as to endanger life, limb, or property or cause serious damage to the work. This includes but is not limited to a failure on the part of the Contractor (a.) to have a full-time quality control person present and fully alert and awake on the disposal area at all times pumping operations are in progress or (b.) provide and maintain the required marine band radio for use by Project and/or (c.) provide and maintain the approved lighting on the disposal area for safe night operations are all basis for Project Engineer to direct suspension of work.
- C.** The Project Engineer will direct the maintenance of the gauges, ranges, location marks and limit marks in proper order and position; but the presence of the Project Engineer shall not relieve the Contractor of responsibility for the proper execution of the work in accordance with the specifications. The Contractor shall be required:
 - 1. To furnish, on the request of the Project Engineer, the use of such boats, boatmen, laborers, and material forming a part of the ordinary and usual equipment and crew of the dredging plant as may be reasonably necessary in inspecting and supervising the work. However, the Contractor will not be required to furnish such facilities for the surveys prescribed.
 - 2. To furnish, on the request of the Project Engineer, suitable transportation from all points on shore designated by the Project Engineer to and from the various pieces of plant, and to and from the disposal site.
 - 3. Should the Contractor refuse, neglect, or delay compliance with these requirements, the specific facilities may be furnished and maintained by the Project Engineer, and the cost thereof will be deducted from any amounts due or to become due the Contractor.

- D.** As part of the Contractor's daily Quality Control Plan, he/she shall take daily soundings behind the dredge to ascertain the accuracy of their dredging operations. The means and methods used for the purposes of quality control shall be described in detail in the Contractor's Quality Control Plan.
- E.** Any/all pre- or post-dredge verification surveys performed by the Contractor shall be performed by a Massachusetts Registered Professional Engineer or Professional Land Surveyor and may also be an A.C.S.M. Certified Hydrographer. Sounding lines shall be made parallel to the direction of the dredge cut at 25-foot offsets for the width of the dredge cut. The Contractor shall employ a competent Professional Engineer or Surveyor licensed in Massachusetts who may also be an A.C.S.M. Certified Hydrographer and has a minimum of five (5) years experience in hydrographic survey. Surveys shall be performed by an individual with at least five (5) years experience in hydrographic surveying in a vessel properly outfitted for hydrographic surveying. Surveys shall be "Special Order" Hydrographic Survey as specified in Appendix B of the USACE Hydrographic Surveys Manual EM-1110-2-1003 (latest edition). All surveys conducted by the Contractor shall be performed with a dual frequency, 200 KHz/24KHz (or approved equal) single beam acoustic survey system. During survey events the proper survey acoustic frequency shall be selected by confirming acoustic depths with a number of manual soundings performed as indicated in the USACE Hydrographic Survey manual. Minimal equipment shall include Differential GPS-sub meter positioning system, on-board computer, digital survey grade fathometer with 200/24 kHz transducer and survey software such as Hypack, Trimble or WinOps. Within three (3) days of performing these surveys, they shall be submitted to the Project Engineer for review, along with a plan and schedule for correcting any unsatisfactory work. The submittal package shall include as a minimum, copies of the fathometer charts, a plot of the soundings, and all digital data reduced to ASCII format. Final grades for payment purposes shall be determined by comparing the pre-dredge and post-dredge surveys as performed by the Project Engineer. Payment quantities will be based on the 200 KHz acoustic soundings.

3.19 FINAL EXAMINATION AND ACCEPTANCE

- A.** As soon as practicable after the completion of the entire work or any section thereof (if the work is divided into sections) as in the opinion of the Project Engineer, such work will be thoroughly examined at the cost and expense of the Owner by sounding or by sweeping, or both, as determined by the Project Engineer by performing a final (post-dredge) hydrographic survey. Prior to the Project Engineer conducting the final survey, the Contractor shall conduct a verification survey and provide the results to the Project Engineer for review to determine if the site has been adequately cleared. Should any shoals, lumps, or other lack of contract depth be disclosed by this examination, the Contractor shall be required to remove same by dredging at no additional cost to the Owner, but if the bottom is soft and the shoal areas are small and form no material obstruction

to navigation, the removal of such shoal may be waived by the discretion of the Project Engineer. The Contractor or his authorized representative will be notified when soundings and/or sweepings are to be made by the Project Engineer, and he/she will be permitted to accompany the survey party. When the area is found to be in a satisfactory condition, it will be accepted finally. Should more than two (2) sounding or sweeping operations by the Project Engineer over an area be necessary by reason of work for the removal of shoals disclosed at a prior sounding or sweeping, the cost of such third and any subsequent sounding or sweeping operations will be charged against the Contractor at the rate of \$8,500.00 dollars per day for each day in which the Project Engineer's plant is engaged in sounding or sweeping and/ or is enroute to or from the site or held at or near the said site for such operations.

- B.** The Contractor shall allow sufficient time for the confirmation of dredging by the Project Engineer and any associated clean-up of areas to be performed within the established environmental windows for dredging and unconfined offshore disposal activities. If it is determined that the Contractor has not satisfactorily completed/performed dredging to the required limits/depth shown on the Contract Drawings and the established dredge and disposal window closes, then Contractor will be responsible for returning the following season to complete all required dredging, at his own expense.
- C.** Final acceptance of the whole or a part of the work and the deductions or corrections of deductions made thereon will not be reopened after having once been made, except on evidence of collusion, fraud, or obvious error, and the acceptance of a completed section shall not change the time of payment of the retained percentages of the whole or any part of the work.

*****END OF SECTION****

ATTACHMENTS

ATTACHMENTS

ATTACHMENT A

MA Prevailing Wage Rates



CHARLES D. BAKER
Governor

KARYN E. POLITO
Lt. Governor

THE COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF LABOR AND WORKFORCE DEVELOPMENT
DEPARTMENT OF LABOR STANDARDS

Prevailing Wage Rates

**As determined by the Director under the provisions of the
Massachusetts General Laws, Chapter 149, Sections 26 to 27H**

ROSALIN ACOSTA
Secretary
WILLIAM D MCKINNEY
Director

Awarding Authority: Town of Nantucket
Contract Number: **City/Town:** NANTUCKET
Description of Work: Polpis Harbor- Dredging of the existing entrance channel using mechanical methods. Approximately 12,000 cubic yards will be dredged & temporarily stockpiled at the designated on-island upland location
Job Location: Polpis Harbor

Information about Prevailing Wage Schedules for Awarding Authorities and Contractors

- This wage schedule applies only to the specific project referenced at the top of this page and uniquely identified by the "Wage Request Number" on all pages of this schedule.
- An Awarding Authority must request an updated wage schedule from the Department of Labor Standards ("DLS") if it has not opened bids or selected a contractor within 90 days of the date of issuance of the wage schedule. For CM AT RISK projects (bid pursuant to G.L. c.149A), the earlier of: (a) the execution date of the GMP Amendment, or (b) the bid for the first construction scope of work must be within 90-days of the wage schedule issuance date.
- The wage schedule shall be incorporated in any advertisement or call for bids for the project as required by M.G.L. c. 149, § 27. The wage schedule shall be made a part of the contract awarded for the project. The wage schedule must be posted in a conspicuous place at the work site for the life of the project in accordance with M.G.L. c. 149 § 27. The wages listed on the wage schedule must be paid to employees performing construction work on the project whether they are employed by the prime contractor, a filed sub-bidder, or any sub-contractor.
- All apprentices working on the project are required to be registered with the Massachusetts Department of Labor Standards, Division of Apprentice Standards (DLS/DAS). Apprentice must keep his/her apprentice identification card on his/her person during all work hours on the project. An apprentice registered with DAS may be paid the lower apprentice wage rate at the applicable step as provided on the prevailing wage schedule. **Any apprentice not registered with DLS/DAS regardless of whether or not they are registered with any other federal, state, local, or private agency must be paid the journeyworker's rate for the trade.**
- The wage rates will remain in effect for the duration of the project, except in the case of multi-year public construction projects. For construction projects lasting longer than one year, awarding authorities must request an updated wage schedule. Awarding authorities are required to request these updates no later than two weeks before the anniversary of the date the contract was executed by the awarding authority and the general contractor. For multi-year CM AT RISK projects, awarding authority must request an annual update no later than two weeks before the anniversary date, determined as the earlier of: (a) the execution date of the GMP Amendment, or (b) the execution date of the first amendment to permit procurement of construction services. Contractors are required to obtain the wage schedules from awarding authorities, and to pay no less than these rates to covered workers. The annual update requirement is not applicable to 27F "rental of equipment" contracts.
- Every contractor or subcontractor which performs construction work on the project is required to submit weekly payroll reports and a Statement of Compliance directly to the awarding authority by mail or email and keep them on file for three years. Each weekly payroll report must contain: the employee's name, address, occupational classification, hours worked, and wages paid. Do not submit weekly payroll reports to DLS. A sample of a payroll reporting form may be obtained at <http://www.mass.gov/dols/pw>.
- Contractors with questions about the wage rates or classifications included on the wage schedule have an affirmative obligation to inquire with DLS at (617) 626-6953.
- Employees not receiving the prevailing wage rate set forth on the wage schedule may report the violation to the Fair Labor Division of the office of the Attorney General at (617) 727-3465.
- Failure of a contractor or subcontractor to pay the prevailing wage rates listed on the wage schedule to all employees who perform construction work on the project is a violation of the law and subjects the contractor or subcontractor to civil and

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
Construction						
(2 AXLE) DRIVER - EQUIPMENT <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE B</i>	12/01/2016	\$32.15	\$10.91	\$10.89	\$0.00	\$53.95
(3 AXLE) DRIVER - EQUIPMENT <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE B</i>	12/01/2016	\$32.22	\$10.91	\$10.89	\$0.00	\$54.02
(4 & 5 AXLE) DRIVER - EQUIPMENT <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE B</i>	12/01/2016	\$32.34	\$10.91	\$10.89	\$0.00	\$54.14
ADS/SUBMERSIBLE PILOT <i>PILE DRIVER LOCAL 56 (ZONE 1)</i>	08/01/2018	\$97.80	\$9.90	\$21.15	\$0.00	\$128.85
For apprentice rates see "Apprentice- PILE DRIVER"	08/01/2019	\$102.78	\$9.90	\$21.15	\$0.00	\$133.83
AIR TRACK OPERATOR <i>LABORERS - ZONE 2</i>	06/01/2018	\$34.00	\$7.70	\$14.02	\$0.00	\$55.72
	12/01/2018	\$34.84	\$7.70	\$14.02	\$0.00	\$56.56
	06/01/2019	\$35.71	\$7.70	\$14.02	\$0.00	\$57.43
	12/01/2019	\$36.57	\$7.70	\$14.02	\$0.00	\$58.29
	06/01/2020	\$37.46	\$7.70	\$14.02	\$0.00	\$59.18
	12/01/2020	\$38.35	\$7.70	\$14.02	\$0.00	\$60.07
	06/01/2021	\$39.27	\$7.70	\$14.02	\$0.00	\$60.99
	12/01/2021	\$40.18	\$7.70	\$14.02	\$0.00	\$61.90
For apprentice rates see "Apprentice- LABORER"						
ASBESTOS WORKER (PIPES & TANKS) <i>HEAT & FROST INSULATORS LOCAL 6 (SOUTHERN MASS)</i>	06/01/2018	\$36.90	\$11.50	\$7.10	\$0.00	\$55.50
	12/01/2018	\$37.90	\$11.50	\$7.10	\$0.00	\$56.50
	06/01/2019	\$38.90	\$11.50	\$7.10	\$0.00	\$57.50
	12/01/2019	\$39.90	\$11.50	\$7.10	\$0.00	\$58.50
	06/01/2020	\$40.90	\$11.50	\$7.10	\$0.00	\$59.50
	12/01/2020	\$41.90	\$11.50	\$7.10	\$0.00	\$60.50
ASPHALT RAKER <i>LABORERS - ZONE 2</i>	06/01/2018	\$33.50	\$7.70	\$14.02	\$0.00	\$55.22
	12/01/2018	\$34.34	\$7.70	\$14.02	\$0.00	\$56.06
	06/01/2019	\$35.21	\$7.70	\$14.02	\$0.00	\$56.93
	12/01/2019	\$36.07	\$7.70	\$14.02	\$0.00	\$57.79
	06/01/2020	\$36.96	\$7.70	\$14.02	\$0.00	\$58.68
	12/01/2020	\$37.85	\$7.70	\$14.02	\$0.00	\$59.57
	06/01/2021	\$38.77	\$7.70	\$14.02	\$0.00	\$60.49
	12/01/2021	\$39.68	\$7.70	\$14.02	\$0.00	\$61.40
For apprentice rates see "Apprentice- LABORER"						
ASPHALT/CONCRETE/CRUSHER PLANT-ON SITE <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2018	\$47.08	\$11.00	\$15.50	\$0.00	\$73.58
	12/01/2018	\$48.23	\$11.00	\$15.50	\$0.00	\$74.73
	06/01/2019	\$49.33	\$11.00	\$15.50	\$0.00	\$75.83
	12/01/2019	\$50.48	\$11.00	\$15.50	\$0.00	\$76.98
	06/01/2020	\$51.58	\$11.00	\$15.50	\$0.00	\$78.08
	12/01/2020	\$52.73	\$11.00	\$15.50	\$0.00	\$79.23
	06/01/2021	\$53.83	\$11.00	\$15.50	\$0.00	\$80.33
	12/01/2021	\$54.98	\$11.00	\$15.50	\$0.00	\$81.48
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
BACKHOE/FRONT-END LOADER <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2018	\$47.08	\$11.00	\$15.50	\$0.00	\$73.58
	12/01/2018	\$48.23	\$11.00	\$15.50	\$0.00	\$74.73
	06/01/2019	\$49.33	\$11.00	\$15.50	\$0.00	\$75.83
	12/01/2019	\$50.48	\$11.00	\$15.50	\$0.00	\$76.98
	06/01/2020	\$51.58	\$11.00	\$15.50	\$0.00	\$78.08
	12/01/2020	\$52.73	\$11.00	\$15.50	\$0.00	\$79.23
	06/01/2021	\$53.83	\$11.00	\$15.50	\$0.00	\$80.33
	12/01/2021	\$54.98	\$11.00	\$15.50	\$0.00	\$81.48
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
BARCO-TYPE JUMPING TAMPER <i>LABORERS - ZONE 2</i>	06/01/2018	\$33.50	\$7.70	\$14.02	\$0.00	\$55.22
	12/01/2018	\$34.34	\$7.70	\$14.02	\$0.00	\$56.06
	06/01/2019	\$35.21	\$7.70	\$14.02	\$0.00	\$56.93
	12/01/2019	\$36.07	\$7.70	\$14.02	\$0.00	\$57.79
	06/01/2020	\$36.96	\$7.70	\$14.02	\$0.00	\$58.68
	12/01/2020	\$37.85	\$7.70	\$14.02	\$0.00	\$59.57
	06/01/2021	\$38.77	\$7.70	\$14.02	\$0.00	\$60.49
	12/01/2021	\$39.68	\$7.70	\$14.02	\$0.00	\$61.40
For apprentice rates see "Apprentice- LABORER"						
BLOCK PAVER, RAMMER / CURB SETTER <i>LABORERS - ZONE 2</i>	06/01/2018	\$34.00	\$7.70	\$14.02	\$0.00	\$55.72
	12/01/2018	\$34.84	\$7.70	\$14.02	\$0.00	\$56.56
	06/01/2019	\$35.71	\$7.70	\$14.02	\$0.00	\$57.43
	12/01/2019	\$36.57	\$7.70	\$14.02	\$0.00	\$58.29
	06/01/2020	\$37.46	\$7.70	\$14.02	\$0.00	\$59.18
	12/01/2020	\$38.35	\$7.70	\$14.02	\$0.00	\$60.07
	06/01/2021	\$39.27	\$7.70	\$14.02	\$0.00	\$60.99
	12/01/2021	\$40.18	\$7.70	\$14.02	\$0.00	\$61.90
For apprentice rates see "Apprentice- LABORER"						
BOILER MAKER <i>BOILERMAKERS LOCAL 29</i>	03/01/2018	\$43.57	\$7.07	\$17.46	\$0.00	\$68.10
	01/01/2019	\$44.71	\$7.07	\$17.72	\$0.00	\$69.50
	01/01/2020	\$46.10	\$7.07	\$17.98	\$0.00	\$71.15

Classification
Effective Date
Base Wage
Health
Pension
**Supplemental
Unemployment**
Total Rate
Apprentice - BOILERMAKER - Local 29
Effective Date - 03/01/2018

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	65	\$28.32	\$7.07	\$11.37	\$0.00	\$46.76
2	65	\$28.32	\$7.07	\$11.37	\$0.00	\$46.76
3	70	\$30.50	\$7.07	\$12.23	\$0.00	\$49.80
4	75	\$32.68	\$7.07	\$13.11	\$0.00	\$52.86
5	80	\$34.86	\$7.07	\$13.97	\$0.00	\$55.90
6	85	\$37.03	\$7.07	\$14.86	\$0.00	\$58.96
7	90	\$39.21	\$7.07	\$15.72	\$0.00	\$62.00
8	95	\$41.39	\$7.07	\$16.61	\$0.00	\$65.07

Effective Date - 01/01/2019

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	65	\$29.06	\$7.07	\$11.52	\$0.00	\$47.65
2	65	\$29.06	\$7.07	\$11.52	\$0.00	\$47.65
3	70	\$31.30	\$7.07	\$12.40	\$0.00	\$50.77
4	75	\$33.53	\$7.07	\$13.30	\$0.00	\$53.90
5	80	\$35.77	\$7.07	\$14.18	\$0.00	\$57.02
6	85	\$38.00	\$7.07	\$15.07	\$0.00	\$60.14
7	90	\$40.24	\$7.07	\$15.95	\$0.00	\$63.26
8	95	\$42.47	\$7.07	\$16.84	\$0.00	\$66.38

Notes:
Apprentice to Journeyworker Ratio:1:4

BRICK/STONE/ARTIFICIAL MASONRY (INCL. MASONRY WATERPROOFING)	08/01/2018	\$52.91	\$10.75	\$20.66	\$0.00	\$84.32
BRICKLAYERS LOCAL 3 (NEW BEDFORD)	02/01/2019	\$53.55	\$10.75	\$20.66	\$0.00	\$84.96
	08/01/2019	\$54.90	\$10.75	\$20.80	\$0.00	\$86.45
	02/01/2020	\$55.54	\$10.75	\$20.80	\$0.00	\$87.09
	08/01/2020	\$56.89	\$10.75	\$20.95	\$0.00	\$88.59
	02/01/2021	\$57.53	\$10.75	\$20.95	\$0.00	\$89.23
	08/01/2021	\$58.93	\$10.75	\$21.11	\$0.00	\$90.79
	02/01/2022	\$59.52	\$10.75	\$21.11	\$0.00	\$91.38

Classification
Effective Date
Base Wage
Health
Pension
**Supplemental
Unemployment**
Total Rate
Apprentice - BRICK/PLASTER/CEMENT MASON - Local 3 New Bedford
Effective Date - 08/01/2018

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$26.46	\$10.75	\$20.66	\$0.00	\$57.87
2	60	\$31.75	\$10.75	\$20.66	\$0.00	\$63.16
3	70	\$37.04	\$10.75	\$20.66	\$0.00	\$68.45
4	80	\$42.33	\$10.75	\$20.66	\$0.00	\$73.74
5	90	\$47.62	\$10.75	\$20.66	\$0.00	\$79.03

Effective Date - 02/01/2019

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$26.78	\$10.75	\$20.66	\$0.00	\$58.19
2	60	\$32.13	\$10.75	\$20.66	\$0.00	\$63.54
3	70	\$37.49	\$10.75	\$20.66	\$0.00	\$68.90
4	80	\$42.84	\$10.75	\$20.66	\$0.00	\$74.25
5	90	\$48.20	\$10.75	\$20.66	\$0.00	\$79.61

Notes:
Apprentice to Journeyworker Ratio:1:5
BULLDOZER/GRADER/SCRAPER
OPERATING ENGINEERS LOCAL 4

06/01/2018	\$46.61	\$11.00	\$15.50	\$0.00	\$73.11
12/01/2018	\$47.75	\$11.00	\$15.50	\$0.00	\$74.25
06/01/2019	\$48.84	\$11.00	\$15.50	\$0.00	\$75.34
12/01/2019	\$49.98	\$11.00	\$15.50	\$0.00	\$76.48
06/01/2020	\$51.06	\$11.00	\$15.50	\$0.00	\$77.56
12/01/2020	\$52.20	\$11.00	\$15.50	\$0.00	\$78.70
06/01/2021	\$53.29	\$11.00	\$15.50	\$0.00	\$79.79
12/01/2021	\$54.43	\$11.00	\$15.50	\$0.00	\$80.93

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

CAISSON & UNDERPINNING BOTTOM MAN
LABORERS - FOUNDATION AND MARINE

06/01/2018	\$39.10	\$7.70	\$15.40	\$0.00	\$62.20
12/01/2018	\$40.05	\$7.70	\$15.40	\$0.00	\$63.15
06/01/2019	\$41.05	\$7.70	\$15.40	\$0.00	\$64.15
12/01/2019	\$42.05	\$7.70	\$15.40	\$0.00	\$65.15
06/01/2020	\$43.04	\$7.70	\$15.40	\$0.00	\$66.14
12/01/2020	\$44.02	\$7.70	\$15.40	\$0.00	\$67.12
06/01/2021	\$45.04	\$7.70	\$15.40	\$0.00	\$68.14
12/01/2021	\$46.05	\$7.70	\$15.40	\$0.00	\$69.15

For apprentice rates see "Apprentice- LABORER"

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
CAISSON & UNDERPINNING LABORER <i>LABORERS - FOUNDATION AND MARINE</i>	06/01/2018	\$37.95	\$7.70	\$15.40	\$0.00	\$61.05
	12/01/2018	\$38.90	\$7.70	\$15.40	\$0.00	\$62.00
	06/01/2019	\$39.90	\$7.70	\$15.40	\$0.00	\$63.00
	12/01/2019	\$40.90	\$7.70	\$15.40	\$0.00	\$64.00
	06/01/2020	\$41.89	\$7.70	\$15.40	\$0.00	\$64.99
	12/01/2020	\$42.87	\$7.70	\$15.40	\$0.00	\$65.97
	06/01/2021	\$43.89	\$7.70	\$15.40	\$0.00	\$66.99
	12/01/2021	\$44.90	\$7.70	\$15.40	\$0.00	\$68.00
For apprentice rates see "Apprentice- LABORER"						
CAISSON & UNDERPINNING TOP MAN <i>LABORERS - FOUNDATION AND MARINE</i>	06/01/2018	\$37.95	\$7.70	\$15.40	\$0.00	\$61.05
	12/01/2018	\$38.90	\$7.70	\$15.40	\$0.00	\$62.00
	06/01/2019	\$39.90	\$7.70	\$15.40	\$0.00	\$63.00
	12/01/2019	\$40.90	\$7.70	\$15.40	\$0.00	\$64.00
	06/01/2020	\$41.89	\$7.70	\$15.40	\$0.00	\$64.99
	12/01/2020	\$42.87	\$7.70	\$15.40	\$0.00	\$65.97
	06/01/2021	\$43.89	\$7.70	\$15.40	\$0.00	\$66.99
	12/01/2021	\$44.90	\$7.70	\$15.40	\$0.00	\$68.00
For apprentice rates see "Apprentice- LABORER"						
CARBIDE CORE DRILL OPERATOR <i>LABORERS - ZONE 2</i>	06/01/2018	\$33.50	\$7.70	\$14.02	\$0.00	\$55.22
	12/01/2018	\$34.34	\$7.70	\$14.02	\$0.00	\$56.06
	06/01/2019	\$35.21	\$7.70	\$14.02	\$0.00	\$56.93
	12/01/2019	\$36.07	\$7.70	\$14.02	\$0.00	\$57.79
	06/01/2020	\$36.96	\$7.70	\$14.02	\$0.00	\$58.68
	12/01/2020	\$37.85	\$7.70	\$14.02	\$0.00	\$59.57
	06/01/2021	\$38.77	\$7.70	\$14.02	\$0.00	\$60.49
	12/01/2021	\$39.68	\$7.70	\$14.02	\$0.00	\$61.40
For apprentice rates see "Apprentice- LABORER"						
CARPENTER <i>CARPENTERS -ZONE 1 (Metro Boston)</i>	09/01/2018	\$48.69	\$9.90	\$17.50	\$0.00	\$76.09
	03/01/2019	\$49.84	\$9.90	\$17.50	\$0.00	\$77.24

Classification
Effective Date
Base Wage
Health
Pension
**Supplemental
Unemployment**
Total Rate
Apprentice - CARPENTER - Zone 1 Metro Boston
Effective Date - 09/01/2018

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$24.35	\$9.90	\$1.73	\$0.00	\$35.98
2	60	\$29.21	\$9.90	\$1.73	\$0.00	\$40.84
3	70	\$34.08	\$9.90	\$12.31	\$0.00	\$56.29
4	75	\$36.52	\$9.90	\$12.31	\$0.00	\$58.73
5	80	\$38.95	\$9.90	\$14.04	\$0.00	\$62.89
6	80	\$38.95	\$9.90	\$14.04	\$0.00	\$62.89
7	90	\$43.82	\$9.90	\$15.77	\$0.00	\$69.49
8	90	\$43.82	\$9.90	\$15.77	\$0.00	\$69.49

Effective Date - 03/01/2019

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$24.92	\$9.90	\$1.73	\$0.00	\$36.55
2	60	\$29.90	\$9.90	\$1.73	\$0.00	\$41.53
3	70	\$34.89	\$9.90	\$12.31	\$0.00	\$57.10
4	75	\$37.38	\$9.90	\$12.31	\$0.00	\$59.59
5	80	\$39.87	\$9.90	\$14.04	\$0.00	\$63.81
6	80	\$39.87	\$9.90	\$14.04	\$0.00	\$63.81
7	90	\$44.86	\$9.90	\$15.77	\$0.00	\$70.53
8	90	\$44.86	\$9.90	\$15.77	\$0.00	\$70.53

Notes:

% Indentured After 10/1/17; 45/45/55/55/70/70/80/80
Step 1&2 \$33.54/ 3&4 \$40.08/ 5&6 \$58.02/ 7&8 \$64.62

Apprentice to Journeyworker Ratio:1:5

CARPENTER WOOD FRAME	04/01/2018	\$31.54	\$7.07	\$7.86	\$0.00	\$46.47
CARPENTERS -ZONE 1 (Wood Frame)	10/01/2018	\$32.01	\$7.07	\$7.86	\$0.00	\$46.94
	04/01/2019	\$32.49	\$7.07	\$7.86	\$0.00	\$47.42
	10/01/2019	\$32.97	\$7.07	\$7.86	\$0.00	\$47.90

All Aspects of New Wood Frame Work - As of 9/1/09 Carpentry work on wood-frame WEATHERIZATION projects shall be paid the WOOD FRAME CARPENTER rate.

Apprentice - CARPENTER (Wood Frame) - Zone 1**Effective Date -** 04/01/2018

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$18.92	\$7.07	\$0.00	\$0.00	\$25.99
2	60	\$18.92	\$7.07	\$0.00	\$0.00	\$25.99
3	65	\$20.50	\$7.07	\$7.86	\$0.00	\$35.43
4	70	\$22.08	\$7.07	\$7.86	\$0.00	\$37.01
5	75	\$23.66	\$7.07	\$7.86	\$0.00	\$38.59
6	80	\$25.23	\$7.07	\$7.86	\$0.00	\$40.16
7	85	\$26.81	\$7.07	\$7.86	\$0.00	\$41.74
8	90	\$28.39	\$7.07	\$7.86	\$0.00	\$43.32

Effective Date - 10/01/2018

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$19.21	\$7.07	\$0.00	\$0.00	\$26.28
2	60	\$19.21	\$7.07	\$0.00	\$0.00	\$26.28
3	65	\$20.81	\$7.07	\$7.86	\$0.00	\$35.74
4	70	\$22.41	\$7.07	\$7.86	\$0.00	\$37.34
5	75	\$24.01	\$7.07	\$7.86	\$0.00	\$38.94
6	80	\$25.61	\$7.07	\$7.86	\$0.00	\$40.54
7	85	\$27.21	\$7.07	\$7.86	\$0.00	\$42.14
8	90	\$28.81	\$7.07	\$7.86	\$0.00	\$43.74

Notes:

% Indentured After 10/1/17; 45/45/55/55/70/70/80/80
 Step 1&2 \$21.26/ 3&4 \$29.17/ 5&6 \$37.01/ 7&8 \$40.16

Apprentice to Journeyworker Ratio:1:5

CEMENT MASONRY/PLASTERING
 BRICKLAYERS LOCAL 3 (NEW BEDFORD)

07/01/2018	\$46.20	\$12.42	\$22.41	\$0.30	\$81.33
01/01/2019	\$47.58	\$12.42	\$22.41	\$0.30	\$82.71
07/01/2019	\$48.32	\$12.42	\$22.41	\$0.30	\$83.45
01/01/2020	\$49.72	\$12.42	\$22.41	\$0.30	\$84.85

Classification
Effective Date
Base Wage
Health
Pension
**Supplemental
Unemployment**
Total Rate
Apprentice - CEMENT MASONRY/PLASTERING - Eastern Mass (New Bedford)
Effective Date - 07/01/2018

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$23.10	\$12.42	\$15.41	\$0.00	\$50.93
2	60	\$27.72	\$12.42	\$17.41	\$0.30	\$57.85
3	65	\$30.03	\$12.42	\$18.41	\$0.30	\$61.16
4	70	\$32.34	\$12.42	\$19.41	\$0.30	\$64.47
5	75	\$34.65	\$12.42	\$20.41	\$0.30	\$67.78
6	80	\$36.96	\$12.42	\$21.41	\$0.30	\$71.09
7	90	\$41.58	\$12.42	\$22.41	\$0.30	\$76.71

Effective Date - 01/01/2019

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$23.79	\$12.42	\$15.41	\$0.00	\$51.62
2	60	\$28.55	\$12.42	\$17.41	\$0.30	\$58.68
3	65	\$30.93	\$12.42	\$18.41	\$0.30	\$62.06
4	70	\$33.31	\$12.42	\$19.41	\$0.30	\$65.44
5	75	\$35.69	\$12.42	\$20.41	\$0.30	\$68.82
6	80	\$38.06	\$12.42	\$21.41	\$0.30	\$72.19
7	90	\$42.82	\$12.42	\$22.41	\$0.30	\$77.95

Notes:

Steps 3,4 are 500 hrs. All other steps are 1,000 hrs.

Apprentice to Journeyworker Ratio:1:3

CHAIN SAW OPERATOR	06/01/2018	\$33.50	\$7.70	\$14.02	\$0.00	\$55.22
LABORERS - ZONE 2	12/01/2018	\$34.34	\$7.70	\$14.02	\$0.00	\$56.06
	06/01/2019	\$35.21	\$7.70	\$14.02	\$0.00	\$56.93
	12/01/2019	\$36.07	\$7.70	\$14.02	\$0.00	\$57.79
	06/01/2020	\$36.96	\$7.70	\$14.02	\$0.00	\$58.68
	12/01/2020	\$37.85	\$7.70	\$14.02	\$0.00	\$59.57
	06/01/2021	\$38.77	\$7.70	\$14.02	\$0.00	\$60.49
	12/01/2021	\$39.68	\$7.70	\$14.02	\$0.00	\$61.40
For apprentice rates see "Apprentice- LABORER"						
CLAM SHELLS/SLURRY BUCKETS/HEADING MACHINES	06/01/2018	\$69.67	\$11.00	\$15.50	\$0.00	\$96.17
OPERATING ENGINEERS LOCAL 4	12/01/2018	\$71.30	\$11.00	\$15.50	\$0.00	\$97.80
	06/01/2019	\$72.87	\$11.00	\$15.50	\$0.00	\$99.37
	12/01/2019	\$74.50	\$11.00	\$15.50	\$0.00	\$101.00
	06/01/2020	\$76.06	\$11.00	\$15.50	\$0.00	\$102.56
	12/01/2020	\$77.69	\$11.00	\$15.50	\$0.00	\$104.19
	06/01/2021	\$79.25	\$11.00	\$15.50	\$0.00	\$105.75
	12/01/2021	\$80.88	\$11.00	\$15.50	\$0.00	\$107.38
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
COMPRESSOR OPERATOR <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2018	\$31.90	\$11.00	\$15.50	\$0.00	\$58.40
	12/01/2018	\$32.68	\$11.00	\$15.50	\$0.00	\$59.18
	06/01/2019	\$33.43	\$11.00	\$15.50	\$0.00	\$59.93
	12/01/2019	\$34.22	\$11.00	\$15.50	\$0.00	\$60.72
	06/01/2020	\$34.97	\$11.00	\$15.50	\$0.00	\$61.47
	12/01/2020	\$35.75	\$11.00	\$15.50	\$0.00	\$62.25
	06/01/2021	\$36.50	\$11.00	\$15.50	\$0.00	\$63.00
	12/01/2021	\$37.29	\$11.00	\$15.50	\$0.00	\$63.79

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

DELEADER (BRIDGE) <i>PAINTERS LOCAL 35 - ZONE 2</i>	07/01/2018	\$50.01	\$8.15	\$20.15	\$0.00	\$78.31
	01/01/2019	\$50.36	\$8.15	\$20.85	\$0.00	\$79.36
	07/01/2019	\$51.46	\$8.15	\$20.85	\$0.00	\$80.46
	01/01/2020	\$52.56	\$8.15	\$20.85	\$0.00	\$81.56
	07/01/2020	\$53.66	\$8.15	\$20.85	\$0.00	\$82.66
	01/01/2021	\$54.76	\$8.15	\$20.85	\$0.00	\$83.76

Apprentice - PAINTER Local 35 - BRIDGES/TANKS

Effective Date - 07/01/2018

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$25.01	\$8.15	\$0.00	\$0.00	\$33.16
2	55	\$27.51	\$8.15	\$5.34	\$0.00	\$41.00
3	60	\$30.01	\$8.15	\$5.82	\$0.00	\$43.98
4	65	\$32.51	\$8.15	\$6.31	\$0.00	\$46.97
5	70	\$35.01	\$8.15	\$17.24	\$0.00	\$60.40
6	75	\$37.51	\$8.15	\$17.73	\$0.00	\$63.39
7	80	\$40.01	\$8.15	\$18.21	\$0.00	\$66.37
8	90	\$45.01	\$8.15	\$19.18	\$0.00	\$72.34

Effective Date - 01/01/2019

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$25.18	\$8.15	\$0.00	\$0.00	\$33.33
2	55	\$27.70	\$8.15	\$5.64	\$0.00	\$41.49
3	60	\$30.22	\$8.15	\$6.15	\$0.00	\$44.52
4	65	\$32.73	\$8.15	\$6.66	\$0.00	\$47.54
5	70	\$35.25	\$8.15	\$17.78	\$0.00	\$61.18
6	75	\$37.77	\$8.15	\$18.29	\$0.00	\$64.21
7	80	\$40.29	\$8.15	\$18.80	\$0.00	\$67.24
8	90	\$45.32	\$8.15	\$19.83	\$0.00	\$73.30

Notes:

Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
DEMO: ADZEMAN <i>LABORERS - ZONE 2</i>	06/01/2018	\$38.15	\$7.70	\$15.20	\$0.00	\$61.05
	12/01/2018	\$39.10	\$7.70	\$15.20	\$0.00	\$62.00
	06/01/2019	\$40.10	\$7.70	\$15.20	\$0.00	\$63.00
	12/01/2019	\$41.10	\$7.70	\$15.20	\$0.00	\$64.00
For apprentice rates see "Apprentice- LABORER"						
DEMO: BACKHOE/LOADER/HAMMER OPERATOR <i>LABORERS - ZONE 2</i>	06/01/2018	\$39.15	\$7.70	\$15.20	\$0.00	\$62.05
	12/01/2018	\$40.10	\$7.70	\$15.20	\$0.00	\$63.00
	06/01/2019	\$41.10	\$7.70	\$15.20	\$0.00	\$64.00
	12/01/2019	\$42.10	\$7.70	\$15.20	\$0.00	\$65.00
For apprentice rates see "Apprentice- LABORER"						
DEMO: BURNERS <i>LABORERS - ZONE 2</i>	06/01/2018	\$38.90	\$7.70	\$15.20	\$0.00	\$61.80
	12/01/2018	\$39.85	\$7.70	\$15.20	\$0.00	\$62.75
	06/01/2019	\$40.85	\$7.70	\$15.20	\$0.00	\$63.75
	12/01/2019	\$41.85	\$7.70	\$15.20	\$0.00	\$64.75
For apprentice rates see "Apprentice- LABORER"						
DEMO: CONCRETE CUTTER/SAWYER <i>LABORERS - ZONE 2</i>	06/01/2018	\$39.15	\$7.70	\$15.20	\$0.00	\$62.05
	12/01/2018	\$40.10	\$7.70	\$15.20	\$0.00	\$63.00
	06/01/2019	\$41.10	\$7.70	\$15.20	\$0.00	\$64.00
	12/01/2019	\$42.10	\$7.70	\$15.20	\$0.00	\$65.00
For apprentice rates see "Apprentice- LABORER"						
DEMO: JACKHAMMER OPERATOR <i>LABORERS - ZONE 2</i>	06/01/2018	\$38.90	\$7.70	\$15.20	\$0.00	\$61.80
	12/01/2018	\$39.85	\$7.70	\$15.20	\$0.00	\$62.75
	06/01/2019	\$40.85	\$7.70	\$15.20	\$0.00	\$63.75
	12/01/2019	\$41.85	\$7.70	\$15.20	\$0.00	\$64.75
For apprentice rates see "Apprentice- LABORER"						
DEMO: WRECKING LABORER <i>LABORERS - ZONE 2</i>	06/01/2018	\$38.15	\$7.70	\$15.20	\$0.00	\$61.05
	12/01/2018	\$39.10	\$7.70	\$15.20	\$0.00	\$62.00
	06/01/2019	\$40.10	\$7.70	\$15.20	\$0.00	\$63.00
	12/01/2019	\$41.10	\$7.70	\$15.20	\$0.00	\$64.00
For apprentice rates see "Apprentice- LABORER"						
DIRECTIONAL DRILL MACHINE OPERATOR <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2018	\$46.61	\$11.00	\$15.50	\$0.00	\$73.11
	12/01/2018	\$47.75	\$11.00	\$15.50	\$0.00	\$74.25
	06/01/2019	\$48.84	\$11.00	\$15.50	\$0.00	\$75.34
	12/01/2019	\$49.98	\$11.00	\$15.50	\$0.00	\$76.48
	06/01/2020	\$51.06	\$11.00	\$15.50	\$0.00	\$77.56
	12/01/2020	\$52.20	\$11.00	\$15.50	\$0.00	\$78.70
	06/01/2021	\$53.29	\$11.00	\$15.50	\$0.00	\$79.79
	12/01/2021	\$54.43	\$11.00	\$15.50	\$0.00	\$80.93
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
DIVER <i>PILE DRIVER LOCAL 56 (ZONE 1)</i>	08/01/2018	\$65.20	\$9.90	\$21.15	\$0.00	\$96.25
	08/01/2019	\$68.52	\$9.90	\$21.15	\$0.00	\$99.57
For apprentice rates see "Apprentice- PILE DRIVER"						
DIVER TENDER <i>PILE DRIVER LOCAL 56 (ZONE 1)</i>	08/01/2018	\$46.57	\$9.90	\$21.15	\$0.00	\$77.62
	08/01/2019	\$48.94	\$9.90	\$21.15	\$0.00	\$79.99
For apprentice rates see "Apprentice- PILE DRIVER"						
DIVER TENDER (EFFLUENT) <i>PILE DRIVER LOCAL 56 (ZONE 1)</i>	08/01/2018	\$69.86	\$9.90	\$21.15	\$0.00	\$100.91
	08/01/2019	\$73.41	\$9.90	\$21.15	\$0.00	\$104.46
For apprentice rates see "Apprentice- PILE DRIVER"						

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
DIVER/SLURRY (EFFLUENT)	08/01/2018	\$97.80	\$9.90	\$21.15	\$0.00	\$128.85
PILE DRIVER LOCAL 56 (ZONE 1)	08/01/2019	\$102.78	\$9.90	\$21.15	\$0.00	\$133.83
For apprentice rates see "Apprentice- PILE DRIVER"						
ELECTRICIAN	09/01/2018	\$41.03	\$9.65	\$12.74	\$0.00	\$63.42
ELECTRICIANS LOCAL 223	03/01/2019	\$41.64	\$9.90	\$13.15	\$0.00	\$64.69
	09/01/2019	\$42.26	\$10.15	\$13.54	\$0.00	\$65.95
	03/01/2020	\$42.87	\$10.40	\$13.94	\$0.00	\$67.21

Apprentice - ELECTRICIAN - Local 223

Effective Date - 09/01/2018

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$16.41	\$9.65	\$0.49	\$0.00	\$26.55
2	42	\$17.23	\$9.65	\$0.52	\$0.00	\$27.40
3	45	\$18.46	\$9.65	\$0.58	\$0.00	\$28.69
4	48	\$19.69	\$9.65	\$4.35	\$0.00	\$33.69
5	50	\$20.52	\$9.65	\$4.45	\$0.00	\$34.62
6	55	\$22.57	\$9.65	\$4.75	\$0.00	\$36.97
7	60	\$24.62	\$9.65	\$5.04	\$0.00	\$39.31
8	65	\$26.67	\$9.65	\$5.34	\$0.00	\$41.66
9	70	\$28.72	\$9.65	\$5.63	\$0.00	\$44.00
10	75	\$30.77	\$9.65	\$5.87	\$0.00	\$46.29

Effective Date - 03/01/2019

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$16.66	\$9.90	\$0.50	\$0.00	\$27.06
2	42	\$17.49	\$9.90	\$0.52	\$0.00	\$27.91
3	45	\$18.74	\$9.90	\$0.58	\$0.00	\$29.22
4	48	\$19.99	\$9.90	\$4.64	\$0.00	\$34.53
5	50	\$20.82	\$9.90	\$4.68	\$0.00	\$35.40
6	55	\$22.90	\$9.90	\$5.04	\$0.00	\$37.84
7	60	\$24.98	\$9.90	\$5.34	\$0.00	\$40.22
8	65	\$27.07	\$9.90	\$5.64	\$0.00	\$42.61
9	70	\$29.15	\$9.90	\$5.93	\$0.00	\$44.98
10	75	\$31.23	\$9.90	\$6.18	\$0.00	\$47.31

Notes:

Steps are 750 hours

Apprentice to Journeyworker Ratio:2:3***

ELEVATOR CONSTRUCTOR	01/01/2018	\$57.62	\$15.43	\$16.61	\$0.00	\$89.66
ELEVATOR CONSTRUCTORS LOCAL 4	01/01/2019	\$59.47	\$15.58	\$17.51	\$0.00	\$92.56
	01/01/2020	\$61.42	\$15.73	\$18.41	\$0.00	\$95.56
	01/01/2021	\$63.47	\$15.88	\$19.31	\$0.00	\$98.66
	01/01/2022	\$65.62	\$16.03	\$20.21	\$0.00	\$101.86

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
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Apprentice - ELEVATOR CONSTRUCTOR - Local 4

Effective Date - 01/01/2018

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$28.81	\$15.43	\$0.00	\$0.00	\$44.24
2	55	\$31.69	\$15.43	\$16.61	\$0.00	\$63.73
3	65	\$37.45	\$15.43	\$16.61	\$0.00	\$69.49
4	70	\$40.33	\$15.43	\$16.61	\$0.00	\$72.37
5	80	\$46.10	\$15.43	\$16.61	\$0.00	\$78.14

Effective Date - 01/01/2019

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$29.74	\$15.58	\$0.00	\$0.00	\$45.32
2	55	\$32.71	\$15.58	\$17.51	\$0.00	\$65.80
3	65	\$38.66	\$15.58	\$17.51	\$0.00	\$71.75
4	70	\$41.63	\$15.58	\$17.51	\$0.00	\$74.72
5	80	\$47.58	\$15.58	\$17.51	\$0.00	\$80.67

Notes:

Steps 1-2 are 6 mos.; Steps 3-5 are 1 year

Apprentice to Journeyworker Ratio:1:1

ELEVATOR CONSTRUCTOR HELPER	01/01/2018	\$40.33	\$15.43	\$16.61	\$0.00	\$72.37
ELEVATOR CONSTRUCTORS LOCAL 4	01/01/2019	\$41.63	\$15.58	\$17.51	\$0.00	\$74.72
	01/01/2020	\$42.99	\$15.73	\$18.41	\$0.00	\$77.13
	01/01/2021	\$44.43	\$15.88	\$19.31	\$0.00	\$79.62
	01/01/2022	\$45.93	\$16.03	\$20.21	\$0.00	\$82.17
For apprentice rates see "Apprentice - ELEVATOR CONSTRUCTOR"						
FENCE & GUARD RAIL ERECTOR	06/01/2018	\$33.50	\$7.70	\$14.02	\$0.00	\$55.22
LABORERS - ZONE 2	12/01/2018	\$34.34	\$7.70	\$14.02	\$0.00	\$56.06
	06/01/2019	\$35.21	\$7.70	\$14.02	\$0.00	\$56.93
	12/01/2019	\$36.07	\$7.70	\$14.02	\$0.00	\$57.79
	06/01/2020	\$36.96	\$7.70	\$14.02	\$0.00	\$58.68
	12/01/2020	\$37.85	\$7.70	\$14.02	\$0.00	\$59.57
	06/01/2021	\$38.77	\$7.70	\$14.02	\$0.00	\$60.49
	12/01/2021	\$39.68	\$7.70	\$14.02	\$0.00	\$61.40
For apprentice rates see "Apprentice- LABORER"						
FIELD ENG.INST.PERSON-BLDG,SITE,HVY/HWY	05/01/2018	\$42.84	\$10.50	\$15.50	\$0.00	\$68.84
OPERATING ENGINEERS LOCAL 4	For apprentice rates see "Apprentice- OPERATING ENGINEERS"					
FIELD ENG.PARTY CHIEF-BLDG,SITE,HVY/HWY	05/01/2018	\$44.31	\$10.50	\$15.50	\$0.00	\$70.31
OPERATING ENGINEERS LOCAL 4	For apprentice rates see "Apprentice- OPERATING ENGINEERS"					
FIELD ENG.ROD PERSON-BLDG,SITE,HVY/HWY	05/01/2018	\$22.51	\$10.50	\$15.50	\$0.00	\$48.51
OPERATING ENGINEERS LOCAL 4	For apprentice rates see "Apprentice- OPERATING ENGINEERS"					

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
FIRE ALARM INSTALLER <i>ELECTRICIANS LOCAL 223</i>	09/01/2018	\$41.03	\$9.65	\$12.74	\$0.00	\$63.42
	03/01/2019	\$41.64	\$9.90	\$13.15	\$0.00	\$64.69
	09/01/2019	\$42.26	\$10.15	\$13.54	\$0.00	\$65.95
	03/01/2020	\$42.87	\$10.40	\$13.94	\$0.00	\$67.21
For apprentice rates see "Apprentice- ELECTRICIAN"						
FIRE ALARM REPAIR / MAINTENANCE / COMMISSIONING <i>ELECTRICIANS</i> <i>LOCAL 223</i>	09/01/2018	\$34.76	\$9.65	\$10.81	\$0.00	\$55.22
	03/01/2019	\$35.25	\$9.90	\$11.14	\$0.00	\$56.29
	09/01/2019	\$35.78	\$10.15	\$11.45	\$0.00	\$57.38
	03/01/2020	\$36.27	\$10.40	\$11.78	\$0.00	\$58.45
For apprentice rates see "Apprentice- TELECOMMUNICATIONS TECHNICIAN"						
FIREMAN (ASST. ENGINEER) <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2018	\$38.83	\$11.00	\$15.50	\$0.00	\$65.33
	12/01/2018	\$39.78	\$11.00	\$15.50	\$0.00	\$66.28
	06/01/2019	\$40.69	\$11.00	\$15.50	\$0.00	\$67.19
	12/01/2019	\$41.64	\$11.00	\$15.50	\$0.00	\$68.14
	06/01/2020	\$42.55	\$11.00	\$15.50	\$0.00	\$69.05
	12/01/2020	\$43.50	\$11.00	\$15.50	\$0.00	\$70.00
	06/01/2021	\$44.41	\$11.00	\$15.50	\$0.00	\$70.91
	12/01/2021	\$45.36	\$11.00	\$15.50	\$0.00	\$71.86
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
FLAGGER & SIGNALER <i>LABORERS - ZONE 2</i>	06/01/2018	\$21.50	\$7.70	\$14.02	\$0.00	\$43.22
	12/01/2018	\$22.50	\$7.70	\$14.02	\$0.00	\$44.22
	06/01/2019	\$22.50	\$7.70	\$14.02	\$0.00	\$44.22
	12/01/2019	\$23.50	\$7.70	\$14.02	\$0.00	\$45.22
	06/01/2020	\$23.50	\$7.70	\$14.02	\$0.00	\$45.22
	12/01/2020	\$24.50	\$7.70	\$14.02	\$0.00	\$46.22
	06/01/2021	\$24.50	\$7.70	\$14.02	\$0.00	\$46.22
	12/01/2021	\$24.50	\$7.70	\$14.02	\$0.00	\$46.22
For apprentice rates see "Apprentice- LABORER"						
FLOORCOVERER <i>FLOORCOVERERS LOCAL 2168 ZONE 1</i>	03/01/2016	\$42.13	\$9.80	\$17.62	\$0.00	\$69.55

Classification
Effective Date
Base Wage
Health
Pension
**Supplemental
Unemployment**
Total Rate
Apprentice - FLOORCOVERER - Local 2168 Zone I
Effective Date - 03/01/2016

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$21.07	\$9.80	\$1.79	\$0.00	\$32.66
2	55	\$23.17	\$9.80	\$1.79	\$0.00	\$34.76
3	60	\$25.28	\$9.80	\$12.25	\$0.00	\$47.33
4	65	\$27.38	\$9.80	\$12.25	\$0.00	\$49.43
5	70	\$29.49	\$9.80	\$14.04	\$0.00	\$53.33
6	75	\$31.60	\$9.80	\$14.04	\$0.00	\$55.44
7	80	\$33.70	\$9.80	\$15.83	\$0.00	\$59.33
8	85	\$35.81	\$9.80	\$15.83	\$0.00	\$61.44

Notes: Steps are 750 hrs.

% After 09/1/17; 45/45/55/55/70/70/80/80 (1500hr Steps)

Step 1&2 \$30.55/ 3&4 \$36.49/ 5&6 \$53.33/ 7&8 \$59.33

Apprentice to Journeyworker Ratio:1:1
FORK LIFT/CHERRY PICKER
OPERATING ENGINEERS LOCAL 4

06/01/2018	\$47.08	\$11.00	\$15.50	\$0.00	\$73.58
12/01/2018	\$48.23	\$11.00	\$15.50	\$0.00	\$74.73
06/01/2019	\$49.33	\$11.00	\$15.50	\$0.00	\$75.83
12/01/2019	\$50.48	\$11.00	\$15.50	\$0.00	\$76.98
06/01/2020	\$51.58	\$11.00	\$15.50	\$0.00	\$78.08
12/01/2020	\$52.73	\$11.00	\$15.50	\$0.00	\$79.23
06/01/2021	\$53.83	\$11.00	\$15.50	\$0.00	\$80.33
12/01/2021	\$54.98	\$11.00	\$15.50	\$0.00	\$81.48

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

GENERATOR/LIGHTING PLANT/HEATERS
OPERATING ENGINEERS LOCAL 4

06/01/2018	\$31.90	\$11.00	\$15.50	\$0.00	\$58.40
12/01/2018	\$32.68	\$11.00	\$15.50	\$0.00	\$59.18
06/01/2019	\$33.43	\$11.00	\$15.50	\$0.00	\$59.93
12/01/2019	\$34.22	\$11.00	\$15.50	\$0.00	\$60.72
06/01/2020	\$34.97	\$11.00	\$15.50	\$0.00	\$61.47
12/01/2020	\$35.75	\$11.00	\$15.50	\$0.00	\$62.25
06/01/2021	\$36.50	\$11.00	\$15.50	\$0.00	\$63.00
12/01/2021	\$37.29	\$11.00	\$15.50	\$0.00	\$63.79

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

**GLAZIER (GLASS PLANK/AIR BARRIER/INTERIOR
SYSTEMS)**
GLAZIERS LOCAL 1333

06/01/2018	\$37.18	\$10.40	\$9.35	\$0.00	\$56.93
06/01/2019	\$38.18	\$10.60	\$9.90	\$0.00	\$58.68
06/01/2020	\$39.18	\$10.80	\$10.45	\$0.00	\$60.43

Classification

**Effective Date Base Wage Health Pension Supplemental
Unemployment Total Rate**

Apprentice - GLAZIER - Local 1333

Effective Date - 06/01/2018

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$18.59	\$10.40	\$1.60	\$0.00	\$30.59
2	56	\$20.91	\$10.40	\$1.60	\$0.00	\$32.91
3	63	\$23.24	\$10.40	\$2.10	\$0.00	\$35.74
4	69	\$25.56	\$10.40	\$2.10	\$0.00	\$38.06
5	75	\$27.89	\$10.40	\$2.60	\$0.00	\$40.89
6	81	\$30.21	\$10.40	\$2.60	\$0.00	\$43.21
7	88	\$32.53	\$10.40	\$9.35	\$0.00	\$52.28
8	94	\$34.86	\$10.40	\$9.35	\$0.00	\$54.61

Effective Date - 06/01/2019

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$19.09	\$10.60	\$1.80	\$0.00	\$31.49
2	56	\$21.48	\$10.60	\$1.80	\$0.00	\$33.88
3	63	\$23.86	\$10.60	\$2.40	\$0.00	\$36.86
4	69	\$26.25	\$10.60	\$2.40	\$0.00	\$39.25
5	75	\$28.64	\$10.60	\$2.90	\$0.00	\$42.14
6	81	\$31.02	\$10.60	\$2.90	\$0.00	\$44.52
7	88	\$33.41	\$10.60	\$9.90	\$0.00	\$53.91
8	94	\$35.79	\$10.60	\$9.90	\$0.00	\$56.29

Notes:

Apprentice to Journeyworker Ratio:1:3

HOISTING ENGINEER/CRANES/GRADALLS	06/01/2018	\$47.08	\$11.00	\$15.50	\$0.00	\$73.58
OPERATING ENGINEERS LOCAL 4	12/01/2018	\$48.23	\$11.00	\$15.50	\$0.00	\$74.73
	06/01/2019	\$49.33	\$11.00	\$15.50	\$0.00	\$75.83
	12/01/2019	\$50.48	\$11.00	\$15.50	\$0.00	\$76.98
	06/01/2020	\$51.58	\$11.00	\$15.50	\$0.00	\$78.08
	12/01/2020	\$52.73	\$11.00	\$15.50	\$0.00	\$79.23
	06/01/2021	\$53.83	\$11.00	\$15.50	\$0.00	\$80.33
	12/01/2021	\$54.98	\$11.00	\$15.50	\$0.00	\$81.48

Apprentice - OPERATING ENGINEERS - Local 4

Effective Date - 06/01/2018

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	55	\$25.89	\$11.00	\$0.00	\$0.00	\$36.89
2	60	\$28.25	\$11.00	\$15.50	\$0.00	\$54.75
3	65	\$30.60	\$11.00	\$15.50	\$0.00	\$57.10
4	70	\$32.96	\$11.00	\$15.50	\$0.00	\$59.46
5	75	\$35.31	\$11.00	\$15.50	\$0.00	\$61.81
6	80	\$37.66	\$11.00	\$15.50	\$0.00	\$64.16
7	85	\$40.02	\$11.00	\$15.50	\$0.00	\$66.52
8	90	\$42.37	\$11.00	\$15.50	\$0.00	\$68.87

Effective Date - 12/01/2018

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	55	\$26.53	\$11.00	\$0.00	\$0.00	\$37.53
2	60	\$28.94	\$11.00	\$15.50	\$0.00	\$55.44
3	65	\$31.35	\$11.00	\$15.50	\$0.00	\$57.85
4	70	\$33.76	\$11.00	\$15.50	\$0.00	\$60.26
5	75	\$36.17	\$11.00	\$15.50	\$0.00	\$62.67
6	80	\$38.58	\$11.00	\$15.50	\$0.00	\$65.08
7	85	\$41.00	\$11.00	\$15.50	\$0.00	\$67.50
8	90	\$43.41	\$11.00	\$15.50	\$0.00	\$69.91

Notes:

Apprentice to Journeyworker Ratio:1:6

HVAC (DUCTWORK) SHEETMETAL WORKERS LOCAL 17 - B	04/01/2018	\$34.96	\$12.20	\$16.30	\$1.90	\$65.36
	10/01/2018	\$35.46	\$12.20	\$16.30	\$1.90	\$65.86
	04/01/2019	\$35.96	\$12.20	\$16.30	\$1.90	\$66.36
For apprentice rates see "Apprentice- SHEET METAL WORKER"						
HVAC (ELECTRICAL CONTROLS) ELECTRICIANS LOCAL 223	09/01/2018	\$41.03	\$9.65	\$12.74	\$0.00	\$63.42
	03/01/2019	\$41.64	\$9.90	\$13.15	\$0.00	\$64.69
	09/01/2019	\$42.26	\$10.15	\$13.54	\$0.00	\$65.95
	03/01/2020	\$42.87	\$10.40	\$13.94	\$0.00	\$67.21
For apprentice rates see "Apprentice- ELECTRICIAN"						
HVAC (TESTING AND BALANCING - AIR) SHEETMETAL WORKERS LOCAL 17 - B	04/01/2018	\$34.96	\$12.20	\$16.30	\$1.90	\$65.36
	10/01/2018	\$35.46	\$12.20	\$16.30	\$1.90	\$65.86
	04/01/2019	\$35.96	\$12.20	\$16.30	\$1.90	\$66.36
For apprentice rates see "Apprentice- SHEET METAL WORKER"						
HVAC (TESTING AND BALANCING -WATER) PLUMBERS & PIPEFITTERS LOCAL 51	09/01/2018	\$42.04	\$10.00	\$18.20	\$0.00	\$70.24
For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"						
HVAC MECHANIC PLUMBERS & PIPEFITTERS LOCAL 51	09/01/2018	\$42.04	\$10.00	\$18.20	\$0.00	\$70.24
For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"						

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
HYDRAULIC DRILLS <i>LABORERS - ZONE 2</i>	06/01/2018	\$34.00	\$7.70	\$14.02	\$0.00	\$55.72
	12/01/2018	\$34.84	\$7.70	\$14.02	\$0.00	\$56.56
	06/01/2019	\$35.71	\$7.70	\$14.02	\$0.00	\$57.43
	12/01/2019	\$36.57	\$7.70	\$14.02	\$0.00	\$58.29
	06/01/2020	\$37.46	\$7.70	\$14.02	\$0.00	\$59.18
	12/01/2020	\$38.35	\$7.70	\$14.02	\$0.00	\$60.07
	06/01/2021	\$39.27	\$7.70	\$14.02	\$0.00	\$60.99
	12/01/2021	\$40.18	\$7.70	\$14.02	\$0.00	\$61.90
For apprentice rates see "Apprentice- LABORER"						
INSULATOR (PIPES & TANKS) <i>HEAT & FROST INSULATORS LOCAL 6 (SOUTHERN MASS)</i>	09/01/2018	\$44.40	\$11.75	\$14.20	\$0.00	\$70.35
	09/01/2019	\$46.65	\$11.75	\$14.20	\$0.00	\$72.60

Apprentice - ASBESTOS INSULATOR (Pipes & Tanks) - Local 6 Southern MA

Effective Date - 09/01/2018

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$22.20	\$11.75	\$10.45	\$0.00	\$44.40
2	60	\$26.64	\$11.75	\$11.20	\$0.00	\$49.59
3	70	\$31.08	\$11.75	\$11.95	\$0.00	\$54.78
4	80	\$35.52	\$11.75	\$12.70	\$0.00	\$59.97

Effective Date - 09/01/2019

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$23.33	\$11.75	\$10.45	\$0.00	\$45.53
2	60	\$27.99	\$11.75	\$11.20	\$0.00	\$50.94
3	70	\$32.66	\$11.75	\$11.95	\$0.00	\$56.36
4	80	\$37.32	\$11.75	\$12.70	\$0.00	\$61.77

Notes:

Steps are 1 year

Apprentice to Journeyworker Ratio:1:4

IRONWORKER/WELDER <i>IRONWORKERS LOCAL 37</i>	09/16/2018	\$37.91	\$7.70	\$17.10	\$0.00	\$62.71
	03/16/2019	\$38.81	\$7.70	\$17.10	\$0.00	\$63.61
	09/16/2019	\$39.71	\$7.70	\$17.10	\$0.00	\$64.51
	03/16/2020	\$40.61	\$7.70	\$17.10	\$0.00	\$65.41
	09/16/2020	\$41.51	\$7.70	\$17.10	\$0.00	\$66.31
	03/16/2021	\$42.46	\$7.70	\$17.10	\$0.00	\$67.26

Classification

**Effective Date Base Wage Health Pension Supplemental
Unemployment Total Rate**

Apprentice - IRONWORKER - Local 37

Effective Date - 09/16/2018

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	70	\$26.54	\$7.70	\$17.10	\$0.00	\$51.34
2	75	\$28.43	\$7.70	\$17.10	\$0.00	\$53.23
3	80	\$30.33	\$7.70	\$17.10	\$0.00	\$55.13
4	85	\$32.22	\$7.70	\$17.10	\$0.00	\$57.02
5	90	\$34.12	\$7.70	\$17.10	\$0.00	\$58.92
6	95	\$36.01	\$7.70	\$17.10	\$0.00	\$60.81

Notes:

Apprentice to Journeyworker Ratio:1:4

JACKHAMMER & PAVING BREAKER OPERATOR	06/01/2018	\$33.50	\$7.70	\$14.02	\$0.00	\$55.22
LABORERS - ZONE 2	12/01/2018	\$34.34	\$7.70	\$14.02	\$0.00	\$56.06
	06/01/2019	\$35.21	\$7.70	\$14.02	\$0.00	\$56.93
	12/01/2019	\$36.07	\$7.70	\$14.02	\$0.00	\$57.79
	06/01/2020	\$36.96	\$7.70	\$14.02	\$0.00	\$58.68
	12/01/2020	\$37.85	\$7.70	\$14.02	\$0.00	\$59.57
	06/01/2021	\$38.77	\$7.70	\$14.02	\$0.00	\$60.49
	12/01/2021	\$39.68	\$7.70	\$14.02	\$0.00	\$61.40
For apprentice rates see "Apprentice- LABORER"						
LABORER	06/01/2018	\$33.25	\$7.70	\$14.02	\$0.00	\$54.97
LABORERS - ZONE 2	12/01/2018	\$34.09	\$7.70	\$14.02	\$0.00	\$55.81
	06/01/2019	\$34.96	\$7.70	\$14.02	\$0.00	\$56.68
	12/01/2019	\$35.82	\$7.70	\$14.02	\$0.00	\$57.54
	06/01/2020	\$36.71	\$7.70	\$14.02	\$0.00	\$58.43
	12/01/2020	\$37.60	\$7.70	\$14.02	\$0.00	\$59.32
	06/01/2021	\$38.52	\$7.70	\$14.02	\$0.00	\$60.24
	12/01/2021	\$39.43	\$7.70	\$14.02	\$0.00	\$61.15

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
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Apprentice - LABORER - Zone 2

Effective Date - 06/01/2018

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$19.95	\$7.70	\$14.02	\$0.00	\$41.67
2	70	\$23.28	\$7.70	\$14.02	\$0.00	\$45.00
3	80	\$26.60	\$7.70	\$14.02	\$0.00	\$48.32
4	90	\$29.93	\$7.70	\$14.02	\$0.00	\$51.65

Effective Date - 12/01/2018

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$20.45	\$7.70	\$14.02	\$0.00	\$42.17
2	70	\$23.86	\$7.70	\$14.02	\$0.00	\$45.58
3	80	\$27.27	\$7.70	\$14.02	\$0.00	\$48.99
4	90	\$30.68	\$7.70	\$14.02	\$0.00	\$52.40

Notes:

Apprentice to Journeyworker Ratio:1:5

LABORER: CARPENTER TENDER LABORERS - ZONE 2	06/01/2018	\$33.25	\$7.70	\$14.02	\$0.00	\$54.97
	12/01/2018	\$34.09	\$7.70	\$14.02	\$0.00	\$55.81
	06/01/2019	\$34.96	\$7.70	\$14.02	\$0.00	\$56.68
	12/01/2019	\$35.82	\$7.70	\$14.02	\$0.00	\$57.54
	06/01/2020	\$36.71	\$7.70	\$14.02	\$0.00	\$58.43
	12/01/2020	\$37.60	\$7.70	\$14.02	\$0.00	\$59.32
	06/01/2021	\$38.52	\$7.70	\$14.02	\$0.00	\$60.24
	12/01/2021	\$39.43	\$7.70	\$14.02	\$0.00	\$61.15
For apprentice rates see "Apprentice- LABORER"						
LABORER: CEMENT FINISHER TENDER LABORERS - ZONE 2	06/01/2018	\$33.25	\$7.70	\$14.02	\$0.00	\$54.97
	12/01/2018	\$34.09	\$7.70	\$14.02	\$0.00	\$55.81
	06/01/2019	\$34.96	\$7.70	\$14.02	\$0.00	\$56.68
	12/01/2019	\$35.82	\$7.70	\$14.02	\$0.00	\$57.54
	06/01/2020	\$36.71	\$7.70	\$14.02	\$0.00	\$58.43
	12/01/2020	\$37.60	\$7.70	\$14.02	\$0.00	\$59.32
	06/01/2021	\$38.52	\$7.70	\$14.02	\$0.00	\$60.24
	12/01/2021	\$39.43	\$7.70	\$14.02	\$0.00	\$61.15
For apprentice rates see "Apprentice- LABORER"						
LABORER: HAZARDOUS WASTE/ASBESTOS REMOVER LABORERS - ZONE 2	06/01/2018	\$33.45	\$7.70	\$13.97	\$0.00	\$55.12
	12/01/2018	\$34.29	\$7.70	\$13.97	\$0.00	\$55.96
	06/01/2019	\$35.16	\$7.70	\$13.97	\$0.00	\$56.83
	12/01/2019	\$36.02	\$7.70	\$13.97	\$0.00	\$57.69
For apprentice rates see "Apprentice- LABORER"						

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
LABORER: MASON TENDER <i>LABORERS - ZONE 2</i>	06/01/2018	\$33.50	\$7.70	\$14.02	\$0.00	\$55.22
	12/01/2018	\$34.34	\$7.70	\$14.02	\$0.00	\$56.06
	06/01/2019	\$35.21	\$7.70	\$14.02	\$0.00	\$56.93
	12/01/2019	\$36.07	\$7.70	\$14.02	\$0.00	\$57.79
	06/01/2020	\$36.96	\$7.70	\$14.02	\$0.00	\$58.68
	12/01/2020	\$37.85	\$7.70	\$14.02	\$0.00	\$59.57
	06/01/2021	\$38.77	\$7.70	\$14.02	\$0.00	\$60.49
	12/01/2021	\$39.68	\$7.70	\$14.02	\$0.00	\$61.40
For apprentice rates see "Apprentice- LABORER"						
LABORER: MULTI-TRADE TENDER <i>LABORERS - ZONE 2</i>	06/01/2018	\$33.25	\$7.70	\$14.02	\$0.00	\$54.97
	12/01/2018	\$34.09	\$7.70	\$14.02	\$0.00	\$55.81
	06/01/2019	\$34.96	\$7.70	\$14.02	\$0.00	\$56.68
	12/01/2019	\$35.82	\$7.70	\$14.02	\$0.00	\$57.54
	06/01/2020	\$36.71	\$7.70	\$14.02	\$0.00	\$58.43
	12/01/2020	\$37.60	\$7.70	\$14.02	\$0.00	\$59.32
	06/01/2021	\$38.52	\$7.70	\$14.02	\$0.00	\$60.24
	12/01/2021	\$39.43	\$7.70	\$14.02	\$0.00	\$61.15
For apprentice rates see "Apprentice- LABORER"						
LABORER: TREE REMOVER <i>LABORERS - ZONE 2</i>	06/01/2018	\$33.25	\$7.70	\$14.02	\$0.00	\$54.97
	12/01/2018	\$34.09	\$7.70	\$14.02	\$0.00	\$55.81
	06/01/2019	\$34.96	\$7.70	\$14.02	\$0.00	\$56.68
	12/01/2019	\$35.82	\$7.70	\$14.02	\$0.00	\$57.54
	06/01/2020	\$36.71	\$7.70	\$14.02	\$0.00	\$58.43
	12/01/2020	\$37.60	\$7.70	\$14.02	\$0.00	\$59.32
	06/01/2021	\$38.52	\$7.70	\$14.02	\$0.00	\$60.24
	12/01/2021	\$39.43	\$7.70	\$14.02	\$0.00	\$61.15
This classification applies to all tree work associated with the removal of standing trees, and trimming and removal of branches and limbs when the work is not done for a utility company for the purpose of operation, maintenance or repair of utility company equipment. For apprentice rates see "Apprentice- LABORER"						
LASER BEAM OPERATOR <i>LABORERS - ZONE 2</i>	06/01/2018	\$33.50	\$7.70	\$14.02	\$0.00	\$55.22
	12/01/2018	\$34.34	\$7.70	\$14.02	\$0.00	\$56.06
	06/01/2019	\$35.21	\$7.70	\$14.02	\$0.00	\$56.93
	12/01/2019	\$36.07	\$7.70	\$14.02	\$0.00	\$57.79
	06/01/2020	\$36.96	\$7.70	\$14.02	\$0.00	\$58.68
	12/01/2020	\$37.85	\$7.70	\$14.02	\$0.00	\$59.57
	06/01/2021	\$38.77	\$7.70	\$14.02	\$0.00	\$60.49
	12/01/2021	\$39.68	\$7.70	\$14.02	\$0.00	\$61.40
For apprentice rates see "Apprentice- LABORER"						
MARBLE & TILE FINISHERS <i>BRICKLAYERS LOCAL 3 - MARBLE & TILE</i>	08/01/2018	\$40.40	\$10.75	\$18.97	\$0.00	\$70.12
	02/01/2019	\$40.91	\$10.75	\$18.97	\$0.00	\$70.63
	08/01/2019	\$41.99	\$10.75	\$19.11	\$0.00	\$71.85
	02/01/2020	\$42.50	\$10.75	\$19.11	\$0.00	\$72.36
	08/01/2020	\$43.58	\$10.75	\$19.26	\$0.00	\$73.59
	02/01/2021	\$44.09	\$10.75	\$19.26	\$0.00	\$74.10
	08/01/2021	\$45.21	\$10.75	\$19.42	\$0.00	\$75.38
	02/01/2022	\$45.68	\$10.75	\$19.42	\$0.00	\$75.85

Apprentice - MARBLE & TILE FINISHER - Local 3 Marble & Tile**Effective Date -** 08/01/2018

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$20.20	\$10.75	\$18.97	\$0.00	\$49.92
2	60	\$24.24	\$10.75	\$18.97	\$0.00	\$53.96
3	70	\$28.28	\$10.75	\$18.97	\$0.00	\$58.00
4	80	\$32.32	\$10.75	\$18.97	\$0.00	\$62.04
5	90	\$36.36	\$10.75	\$18.97	\$0.00	\$66.08

Effective Date - 02/01/2019

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$20.46	\$10.75	\$18.97	\$0.00	\$50.18
2	60	\$24.55	\$10.75	\$18.97	\$0.00	\$54.27
3	70	\$28.64	\$10.75	\$18.97	\$0.00	\$58.36
4	80	\$32.73	\$10.75	\$18.97	\$0.00	\$62.45
5	90	\$36.82	\$10.75	\$18.97	\$0.00	\$66.54

Notes:**Apprentice to Journeyworker Ratio:1:3**MARBLE MASONS, TILELAYERS & TERRAZZO MECH
BRICKLAYERS LOCAL 3 - MARBLE & TILE

08/01/2018	\$52.95	\$10.75	\$20.66	\$0.00	\$84.36
02/01/2019	\$53.57	\$10.75	\$20.66	\$0.00	\$84.98
08/01/2019	\$54.92	\$10.75	\$20.80	\$0.00	\$86.47
02/01/2020	\$55.55	\$10.75	\$20.80	\$0.00	\$87.10
08/01/2020	\$56.90	\$10.75	\$20.95	\$0.00	\$88.60
02/01/2021	\$57.54	\$10.75	\$20.95	\$0.00	\$89.24
08/01/2021	\$58.94	\$10.75	\$21.11	\$0.00	\$90.80
02/01/2022	\$59.51	\$10.75	\$21.11	\$0.00	\$91.37

Classification
Effective Date
Base Wage
Health
Pension
**Supplemental
Unemployment**
Total Rate
Apprentice - MARBLE-TILE-TERRAZZO MECHANIC - Local 3 Marble & Tile
Effective Date - 08/01/2018

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$26.48	\$10.75	\$20.66	\$0.00	\$57.89
2	60	\$31.77	\$10.75	\$20.66	\$0.00	\$63.18
3	70	\$37.07	\$10.75	\$20.66	\$0.00	\$68.48
4	80	\$42.36	\$10.75	\$20.66	\$0.00	\$73.77
5	90	\$47.66	\$10.75	\$20.66	\$0.00	\$79.07

Effective Date - 02/01/2019

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$26.79	\$10.75	\$20.66	\$0.00	\$58.20
2	60	\$32.14	\$10.75	\$20.66	\$0.00	\$63.55
3	70	\$37.50	\$10.75	\$20.66	\$0.00	\$68.91
4	80	\$42.86	\$10.75	\$20.66	\$0.00	\$74.27
5	90	\$48.21	\$10.75	\$20.66	\$0.00	\$79.62

Notes:
Apprentice to Journeyworker Ratio:1:5
MECH. SWEEPER OPERATOR (ON CONST. SITES)
OPERATING ENGINEERS LOCAL 4

06/01/2018	\$46.61	\$11.00	\$15.50	\$0.00	\$73.11
12/01/2018	\$47.75	\$11.00	\$15.50	\$0.00	\$74.25
06/01/2019	\$48.84	\$11.00	\$15.50	\$0.00	\$75.34
12/01/2019	\$49.98	\$11.00	\$15.50	\$0.00	\$76.48
06/01/2020	\$51.06	\$11.00	\$15.50	\$0.00	\$77.56
12/01/2020	\$52.20	\$11.00	\$15.50	\$0.00	\$78.70
06/01/2021	\$53.29	\$11.00	\$15.50	\$0.00	\$79.79
12/01/2021	\$54.43	\$11.00	\$15.50	\$0.00	\$80.93

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

MECHANICS MAINTENANCE
OPERATING ENGINEERS LOCAL 4

06/01/2018	\$46.61	\$11.00	\$15.50	\$0.00	\$73.11
12/01/2018	\$47.75	\$11.00	\$15.50	\$0.00	\$74.25
06/01/2019	\$48.84	\$11.00	\$15.50	\$0.00	\$75.34
12/01/2019	\$49.98	\$11.00	\$15.50	\$0.00	\$76.48
06/01/2020	\$51.06	\$11.00	\$15.50	\$0.00	\$77.56
12/01/2020	\$52.20	\$11.00	\$15.50	\$0.00	\$78.70
06/01/2021	\$53.29	\$11.00	\$15.50	\$0.00	\$79.79
12/01/2021	\$54.43	\$11.00	\$15.50	\$0.00	\$80.93

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

MILLWRIGHT (Zone 2)
MILLWRIGHTS LOCAL 1121 - Zone 2

04/01/2018	\$37.17	\$9.90	\$18.50	\$0.00	\$65.57
10/01/2018	\$38.02	\$9.90	\$18.50	\$0.00	\$66.42
04/01/2019	\$38.87	\$9.90	\$18.50	\$0.00	\$67.27

Classification

Effective Date Base Wage Health Pension Supplemental
Unemployment Total Rate

Apprentice - MILLWRIGHT - Local 1121 Zone 2
Effective Date - 04/01/2018

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	55	\$20.44	\$9.90	\$5.31	\$0.00	\$35.65
2	65	\$24.16	\$9.90	\$15.13	\$0.00	\$49.19
3	75	\$27.88	\$9.90	\$16.10	\$0.00	\$53.88
4	85	\$31.59	\$9.90	\$17.06	\$0.00	\$58.55

Effective Date - 10/01/2018

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	55	\$20.91	\$9.90	\$5.31	\$0.00	\$36.12
2	65	\$24.71	\$9.90	\$15.13	\$0.00	\$49.74
3	75	\$28.52	\$9.90	\$16.10	\$0.00	\$54.52
4	85	\$32.32	\$9.90	\$17.06	\$0.00	\$59.28

Notes:

Steps are 2,000 hours

Apprentice to Journeyworker Ratio:1:5

MORTAR MIXER	06/01/2018	\$33.50	\$7.70	\$14.02	\$0.00	\$55.22
LABORERS - ZONE 2	12/01/2018	\$34.34	\$7.70	\$14.02	\$0.00	\$56.06
	06/01/2019	\$35.21	\$7.70	\$14.02	\$0.00	\$56.93
	12/01/2019	\$36.07	\$7.70	\$14.02	\$0.00	\$57.79
	06/01/2020	\$36.96	\$7.70	\$14.02	\$0.00	\$58.68
	12/01/2020	\$37.85	\$7.70	\$14.02	\$0.00	\$59.57
	06/01/2021	\$38.77	\$7.70	\$14.02	\$0.00	\$60.49
	12/01/2021	\$39.68	\$7.70	\$14.02	\$0.00	\$61.40
For apprentice rates see "Apprentice- LABORER"						
OILER (OTHER THAN TRUCK CRANES,GRADALLS)	06/01/2018	\$23.14	\$11.00	\$15.50	\$0.00	\$49.64
OPERATING ENGINEERS LOCAL 4	12/01/2018	\$23.71	\$11.00	\$15.50	\$0.00	\$50.21
	06/01/2019	\$24.26	\$11.00	\$15.50	\$0.00	\$50.76
	12/01/2019	\$24.83	\$11.00	\$15.50	\$0.00	\$51.33
	06/01/2020	\$25.38	\$11.00	\$15.50	\$0.00	\$51.88
	12/01/2020	\$25.95	\$11.00	\$15.50	\$0.00	\$52.45
	06/01/2021	\$26.50	\$11.00	\$15.50	\$0.00	\$53.00
	12/01/2021	\$27.08	\$11.00	\$15.50	\$0.00	\$53.58
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
OILER (TRUCK CRANES, GRADALLS)	06/01/2018	\$27.40	\$11.00	\$15.50	\$0.00	\$53.90
OPERATING ENGINEERS LOCAL 4	12/01/2018	\$28.07	\$11.00	\$15.50	\$0.00	\$54.57
	06/01/2019	\$28.72	\$11.00	\$15.50	\$0.00	\$55.22
	12/01/2019	\$29.39	\$11.00	\$15.50	\$0.00	\$55.89
	06/01/2020	\$30.04	\$11.00	\$15.50	\$0.00	\$56.54
	12/01/2020	\$30.72	\$11.00	\$15.50	\$0.00	\$57.22
	06/01/2021	\$31.36	\$11.00	\$15.50	\$0.00	\$57.86
	12/01/2021	\$32.04	\$11.00	\$15.50	\$0.00	\$58.54

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
OTHER POWER DRIVEN EQUIPMENT - CLASS II	06/01/2018	\$46.61	\$11.00	\$15.50	\$0.00	\$73.11
OPERATING ENGINEERS LOCAL 4	12/01/2018	\$47.75	\$11.00	\$15.50	\$0.00	\$74.25
	06/01/2019	\$48.84	\$11.00	\$15.50	\$0.00	\$75.34
	12/01/2019	\$49.98	\$11.00	\$15.50	\$0.00	\$76.48
	06/01/2020	\$51.06	\$11.00	\$15.50	\$0.00	\$77.56
	12/01/2020	\$52.20	\$11.00	\$15.50	\$0.00	\$78.70
	06/01/2021	\$53.29	\$11.00	\$15.50	\$0.00	\$79.79
	12/01/2021	\$54.43	\$11.00	\$15.50	\$0.00	\$80.93
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
PAINTER (BRIDGES/TANKS)	07/01/2018	\$50.01	\$8.15	\$20.15	\$0.00	\$78.31
PAINTERS LOCAL 35 - ZONE 2	01/01/2019	\$50.36	\$8.15	\$20.85	\$0.00	\$79.36
	07/01/2019	\$51.46	\$8.15	\$20.85	\$0.00	\$80.46
	01/01/2020	\$52.56	\$8.15	\$20.85	\$0.00	\$81.56
	07/01/2020	\$53.66	\$8.15	\$20.85	\$0.00	\$82.66
	01/01/2021	\$54.76	\$8.15	\$20.85	\$0.00	\$83.76

Apprentice - PAINTER Local 35 - BRIDGES/TANKS

Effective Date - 07/01/2018

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$25.01	\$8.15	\$0.00	\$0.00	\$33.16
2	55	\$27.51	\$8.15	\$5.34	\$0.00	\$41.00
3	60	\$30.01	\$8.15	\$5.82	\$0.00	\$43.98
4	65	\$32.51	\$8.15	\$6.31	\$0.00	\$46.97
5	70	\$35.01	\$8.15	\$17.24	\$0.00	\$60.40
6	75	\$37.51	\$8.15	\$17.73	\$0.00	\$63.39
7	80	\$40.01	\$8.15	\$18.21	\$0.00	\$66.37
8	90	\$45.01	\$8.15	\$19.18	\$0.00	\$72.34

Effective Date - 01/01/2019

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$25.18	\$8.15	\$0.00	\$0.00	\$33.33
2	55	\$27.70	\$8.15	\$5.64	\$0.00	\$41.49
3	60	\$30.22	\$8.15	\$6.15	\$0.00	\$44.52
4	65	\$32.73	\$8.15	\$6.66	\$0.00	\$47.54
5	70	\$35.25	\$8.15	\$17.78	\$0.00	\$61.18
6	75	\$37.77	\$8.15	\$18.29	\$0.00	\$64.21
7	80	\$40.29	\$8.15	\$18.80	\$0.00	\$67.24
8	90	\$45.32	\$8.15	\$19.83	\$0.00	\$73.30

Notes:

Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
PAINTER (SPRAY OR SANDBLAST, NEW) *	07/01/2018	\$40.91	\$8.15	\$20.15	\$0.00	\$69.21
* If 30% or more of surfaces to be painted are new construction, NEW paint rate shall be used. <i>PAINTERS LOCAL 35 - ZONE 2</i>	01/01/2019	\$41.26	\$8.15	\$20.85	\$0.00	\$70.26
	07/01/2019	\$42.36	\$8.15	\$20.85	\$0.00	\$71.36
	01/01/2020	\$43.46	\$8.15	\$20.85	\$0.00	\$72.46
	07/01/2020	\$44.56	\$8.15	\$20.85	\$0.00	\$73.56
	01/01/2021	\$45.66	\$8.15	\$20.85	\$0.00	\$74.66

Apprentice - PAINTER Local 35 Zone 2 - Spray/Sandblast - New

Effective Date - 07/01/2018

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$20.46	\$8.15	\$0.00	\$0.00	\$28.61
2	55	\$22.50	\$8.15	\$5.34	\$0.00	\$35.99
3	60	\$24.55	\$8.15	\$5.82	\$0.00	\$38.52
4	65	\$26.59	\$8.15	\$6.31	\$0.00	\$41.05
5	70	\$28.64	\$8.15	\$17.24	\$0.00	\$54.03
6	75	\$30.68	\$8.15	\$17.73	\$0.00	\$56.56
7	80	\$32.73	\$8.15	\$18.21	\$0.00	\$59.09
8	90	\$36.82	\$8.15	\$19.18	\$0.00	\$64.15

Effective Date - 01/01/2019

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$20.63	\$8.15	\$0.00	\$0.00	\$28.78
2	55	\$22.69	\$8.15	\$5.64	\$0.00	\$36.48
3	60	\$24.76	\$8.15	\$6.15	\$0.00	\$39.06
4	65	\$26.82	\$8.15	\$6.66	\$0.00	\$41.63
5	70	\$28.88	\$8.15	\$17.78	\$0.00	\$54.81
6	75	\$30.95	\$8.15	\$18.29	\$0.00	\$57.39
7	80	\$33.01	\$8.15	\$18.80	\$0.00	\$59.96
8	90	\$37.13	\$8.15	\$19.83	\$0.00	\$65.11

Notes:

Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

PAINTER (SPRAY OR SANDBLAST, REPAINT)	07/01/2018	\$38.97	\$8.15	\$20.15	\$0.00	\$67.27
<i>PAINTERS LOCAL 35 - ZONE 2</i>	01/01/2019	\$39.32	\$8.15	\$20.85	\$0.00	\$68.32
	07/01/2019	\$40.42	\$8.15	\$20.85	\$0.00	\$69.42
	01/01/2020	\$41.52	\$8.15	\$20.85	\$0.00	\$70.52
	07/01/2020	\$42.62	\$8.15	\$20.85	\$0.00	\$71.62
	01/01/2021	\$43.72	\$8.15	\$20.85	\$0.00	\$72.72

Classification

**Effective Date Base Wage Health Pension Supplemental
Unemployment Total Rate**

Apprentice - PAINTER Local 35 Zone 2 - Spray/Sandblast - Repaint
Effective Date - 07/01/2018

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$19.49	\$8.15	\$0.00	\$0.00	\$27.64
2	55	\$21.43	\$8.15	\$5.34	\$0.00	\$34.92
3	60	\$23.38	\$8.15	\$5.82	\$0.00	\$37.35
4	65	\$25.33	\$8.15	\$6.31	\$0.00	\$39.79
5	70	\$27.28	\$8.15	\$17.24	\$0.00	\$52.67
6	75	\$29.23	\$8.15	\$17.73	\$0.00	\$55.11
7	80	\$31.18	\$8.15	\$18.21	\$0.00	\$57.54
8	90	\$35.07	\$8.15	\$19.18	\$0.00	\$62.40

Effective Date - 01/01/2019

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$19.66	\$8.15	\$0.00	\$0.00	\$27.81
2	55	\$21.63	\$8.15	\$5.64	\$0.00	\$35.42
3	60	\$23.59	\$8.15	\$6.15	\$0.00	\$37.89
4	65	\$25.56	\$8.15	\$6.66	\$0.00	\$40.37
5	70	\$27.52	\$8.15	\$17.78	\$0.00	\$53.45
6	75	\$29.49	\$8.15	\$18.29	\$0.00	\$55.93
7	80	\$31.46	\$8.15	\$18.80	\$0.00	\$58.41
8	90	\$35.39	\$8.15	\$19.83	\$0.00	\$63.37

Notes:

Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

PAINTER (TRAFFIC MARKINGS)	06/01/2018	\$33.25	\$7.70	\$14.02	\$0.00	\$54.97
LABORERS - ZONE 2	12/01/2018	\$34.09	\$7.70	\$14.02	\$0.00	\$55.81
	06/01/2019	\$34.96	\$7.70	\$14.02	\$0.00	\$56.68
	12/01/2019	\$35.82	\$7.70	\$14.02	\$0.00	\$57.54
	06/01/2020	\$36.71	\$7.70	\$14.02	\$0.00	\$58.43
	12/01/2020	\$37.60	\$7.70	\$14.02	\$0.00	\$59.32
	06/01/2021	\$38.52	\$7.70	\$14.02	\$0.00	\$60.24
	12/01/2021	\$39.43	\$7.70	\$14.02	\$0.00	\$61.15

For Apprentice rates see "Apprentice- LABORER"

PAINTER / TAPER (BRUSH, NEW) *	07/01/2018	\$39.51	\$8.15	\$20.15	\$0.00	\$67.81
* If 30% or more of surfaces to be painted are new construction, NEW paint rate shall be used. PAINTERS LOCAL 35 - ZONE 2	01/01/2019	\$39.86	\$8.15	\$20.85	\$0.00	\$68.86
	07/01/2019	\$40.96	\$8.15	\$20.85	\$0.00	\$69.96
	01/01/2020	\$42.06	\$8.15	\$20.85	\$0.00	\$71.06
	07/01/2020	\$43.16	\$8.15	\$20.85	\$0.00	\$72.16
	01/01/2021	\$44.25	\$8.15	\$20.85	\$0.00	\$73.25

Apprentice - PAINTER - Local 35 Zone 2 - BRUSH NEW**Effective Date - 07/01/2018**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$19.76	\$8.15	\$0.00	\$0.00	\$27.91
2	55	\$21.73	\$8.15	\$5.34	\$0.00	\$35.22
3	60	\$23.71	\$8.15	\$5.82	\$0.00	\$37.68
4	65	\$25.68	\$8.15	\$6.31	\$0.00	\$40.14
5	70	\$27.66	\$8.15	\$17.24	\$0.00	\$53.05
6	75	\$29.63	\$8.15	\$17.73	\$0.00	\$55.51
7	80	\$31.61	\$8.15	\$18.21	\$0.00	\$57.97
8	90	\$35.56	\$8.15	\$19.18	\$0.00	\$62.89

Effective Date - 01/01/2019

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$19.93	\$8.15	\$0.00	\$0.00	\$28.08
2	55	\$21.92	\$8.15	\$5.64	\$0.00	\$35.71
3	60	\$23.92	\$8.15	\$6.15	\$0.00	\$38.22
4	65	\$25.91	\$8.15	\$6.66	\$0.00	\$40.72
5	70	\$27.90	\$8.15	\$17.78	\$0.00	\$53.83
6	75	\$29.90	\$8.15	\$18.29	\$0.00	\$56.34
7	80	\$31.89	\$8.15	\$18.80	\$0.00	\$58.84
8	90	\$35.87	\$8.15	\$19.83	\$0.00	\$63.85

Notes:

Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

PAINTER / TAPER (BRUSH, REPAINT)

PAINTERS LOCAL 35 - ZONE 2

07/01/2018	\$37.57	\$8.15	\$20.15	\$0.00	\$65.87
01/01/2019	\$37.92	\$8.15	\$20.85	\$0.00	\$66.92
07/01/2019	\$39.02	\$8.15	\$20.85	\$0.00	\$68.02
01/01/2020	\$40.12	\$8.15	\$20.85	\$0.00	\$69.12
07/01/2020	\$41.22	\$8.15	\$20.85	\$0.00	\$70.22
01/01/2021	\$42.32	\$8.15	\$20.85	\$0.00	\$71.32

Apprentice - PAINTER Local 35 Zone 2 - BRUSH REPAINT**Effective Date - 07/01/2018**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$18.79	\$8.15	\$0.00	\$0.00	\$26.94
2	55	\$20.66	\$8.15	\$5.34	\$0.00	\$34.15
3	60	\$22.54	\$8.15	\$5.82	\$0.00	\$36.51
4	65	\$24.42	\$8.15	\$6.31	\$0.00	\$38.88
5	70	\$26.30	\$8.15	\$17.24	\$0.00	\$51.69
6	75	\$28.18	\$8.15	\$17.73	\$0.00	\$54.06
7	80	\$30.06	\$8.15	\$18.21	\$0.00	\$56.42
8	90	\$33.81	\$8.15	\$19.18	\$0.00	\$61.14

Effective Date - 01/01/2019

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$18.96	\$8.15	\$0.00	\$0.00	\$27.11
2	55	\$20.86	\$8.15	\$5.64	\$0.00	\$34.65
3	60	\$22.75	\$8.15	\$6.15	\$0.00	\$37.05
4	65	\$24.65	\$8.15	\$6.66	\$0.00	\$39.46
5	70	\$26.54	\$8.15	\$17.78	\$0.00	\$52.47
6	75	\$28.44	\$8.15	\$18.29	\$0.00	\$54.88
7	80	\$30.34	\$8.15	\$18.80	\$0.00	\$57.29
8	90	\$34.13	\$8.15	\$19.83	\$0.00	\$62.11

Notes:

Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

PANEL & PICKUP TRUCKS DRIVER TEAMSTERS JOINT COUNCIL NO. 10 ZONE B	12/01/2012	\$30.28	\$9.07	\$8.00	\$0.00	\$47.35
PIER AND DOCK CONSTRUCTOR (UNDERPINNING AND DECK) PILE DRIVER LOCAL 56 (ZONE 1) For apprentice rates see "Apprentice- PILE DRIVER"	08/01/2018	\$46.57	\$9.90	\$21.15	\$0.00	\$77.62
	08/01/2019	\$48.94	\$9.90	\$21.15	\$0.00	\$79.99
PILE DRIVER PILE DRIVER LOCAL 56 (ZONE 1)	08/01/2018	\$46.57	\$9.90	\$21.15	\$0.00	\$77.62
	08/01/2019	\$48.94	\$9.90	\$21.15	\$0.00	\$79.99

Classification

Effective Date Base Wage Health Pension Supplemental
Unemployment Total Rate

Apprentice - PILE DRIVER - Local 56 Zone 1
Effective Date - 08/01/2018

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$23.29	\$9.90	\$21.15	\$0.00	\$54.34
2	60	\$27.94	\$9.90	\$21.15	\$0.00	\$58.99
3	70	\$32.60	\$9.90	\$21.15	\$0.00	\$63.65
4	75	\$34.93	\$9.90	\$21.15	\$0.00	\$65.98
5	80	\$37.26	\$9.90	\$21.15	\$0.00	\$68.31
6	80	\$37.26	\$9.90	\$21.15	\$0.00	\$68.31
7	90	\$41.91	\$9.90	\$21.15	\$0.00	\$72.96
8	90	\$41.91	\$9.90	\$21.15	\$0.00	\$72.96

Effective Date - 08/01/2019

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$24.47	\$9.90	\$21.15	\$0.00	\$55.52
2	60	\$29.36	\$9.90	\$21.15	\$0.00	\$60.41
3	70	\$34.26	\$9.90	\$21.15	\$0.00	\$65.31
4	75	\$36.71	\$9.90	\$21.15	\$0.00	\$67.76
5	80	\$39.15	\$9.90	\$21.15	\$0.00	\$70.20
6	80	\$39.15	\$9.90	\$21.15	\$0.00	\$70.20
7	90	\$44.05	\$9.90	\$21.15	\$0.00	\$75.10
8	90	\$44.05	\$9.90	\$21.15	\$0.00	\$75.10

Notes:
Apprentice to Journeyworker Ratio:1:5

PIPELAYER	06/01/2018	\$33.50	\$7.70	\$14.02	\$0.00	\$55.22
LABORERS - ZONE 2	12/01/2018	\$34.34	\$7.70	\$14.02	\$0.00	\$56.06
	06/01/2019	\$35.21	\$7.70	\$14.02	\$0.00	\$56.93
	12/01/2019	\$36.07	\$7.70	\$14.02	\$0.00	\$57.79
	06/01/2020	\$36.96	\$7.70	\$14.02	\$0.00	\$58.68
	12/01/2020	\$37.85	\$7.70	\$14.02	\$0.00	\$59.57
	06/01/2021	\$38.77	\$7.70	\$14.02	\$0.00	\$60.49
	12/01/2021	\$39.68	\$7.70	\$14.02	\$0.00	\$61.40

For apprentice rates see "Apprentice- LABORER"

PLUMBER & PIPEFITTER	09/01/2018	\$42.04	\$10.00	\$18.20	\$0.00	\$70.24
PLUMBERS & PIPEFITTERS LOCAL 51						

Apprentice - PLUMBER/PIPEFITTER - Local 51

Effective Date - 09/01/2018

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$16.82	\$10.00	\$2.50	\$0.00	\$29.32
2	50	\$21.02	\$10.00	\$2.50	\$0.00	\$33.52
3	60	\$25.22	\$10.00	\$7.85	\$0.00	\$43.07
4	70	\$29.43	\$10.00	\$12.56	\$0.00	\$51.99
5	80	\$33.63	\$10.00	\$15.70	\$0.00	\$59.33

Notes:

Steps 2000hrs. Prior 9/1/05; 40/40/45/50/55/60/65/75/80/85

Apprentice to Journeyworker Ratio:1:3

PNEUMATIC CONTROLS (TEMP.) <i>PLUMBERS & PIPEFITTERS LOCAL 51</i>	09/01/2018	\$42.04	\$10.00	\$18.20	\$0.00	\$70.24
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For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"

PNEUMATIC DRILL/TOOL OPERATOR <i>LABORERS - ZONE 2</i>	06/01/2018	\$33.50	\$7.70	\$14.02	\$0.00	\$55.22
	12/01/2018	\$34.34	\$7.70	\$14.02	\$0.00	\$56.06
	06/01/2019	\$35.21	\$7.70	\$14.02	\$0.00	\$56.93
	12/01/2019	\$36.07	\$7.70	\$14.02	\$0.00	\$57.79
	06/01/2020	\$36.96	\$7.70	\$14.02	\$0.00	\$58.68
	12/01/2020	\$37.85	\$7.70	\$14.02	\$0.00	\$59.57
	06/01/2021	\$38.77	\$7.70	\$14.02	\$0.00	\$60.49
	12/01/2021	\$39.68	\$7.70	\$14.02	\$0.00	\$61.40

For apprentice rates see "Apprentice- LABORER"

POWDERMAN & BLASTER <i>LABORERS - ZONE 2</i>	06/01/2018	\$34.25	\$7.70	\$14.02	\$0.00	\$55.97
	12/01/2018	\$35.09	\$7.70	\$14.02	\$0.00	\$56.81
	06/01/2019	\$35.96	\$7.70	\$14.02	\$0.00	\$57.68
	12/01/2019	\$36.82	\$7.70	\$14.02	\$0.00	\$58.54
	06/01/2020	\$37.71	\$7.70	\$14.02	\$0.00	\$59.43
	12/01/2020	\$38.60	\$7.70	\$14.02	\$0.00	\$60.32
	06/01/2021	\$39.52	\$7.70	\$14.02	\$0.00	\$61.24
	12/01/2021	\$40.43	\$7.70	\$14.02	\$0.00	\$62.15

For apprentice rates see "Apprentice- LABORER"

POWER SHOVEL/DERRICK/TRENCHING MACHINE <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2018	\$47.08	\$11.00	\$15.50	\$0.00	\$73.58
	12/01/2018	\$48.23	\$11.00	\$15.50	\$0.00	\$74.73
	06/01/2019	\$49.33	\$11.00	\$15.50	\$0.00	\$75.83
	12/01/2019	\$50.48	\$11.00	\$15.50	\$0.00	\$76.98
	06/01/2020	\$51.58	\$11.00	\$15.50	\$0.00	\$78.08
	12/01/2020	\$52.73	\$11.00	\$15.50	\$0.00	\$79.23
	06/01/2021	\$53.83	\$11.00	\$15.50	\$0.00	\$80.33
	12/01/2021	\$54.98	\$11.00	\$15.50	\$0.00	\$81.48

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
PUMP OPERATOR (CONCRETE) <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2018	\$47.08	\$11.00	\$15.50	\$0.00	\$73.58
	12/01/2018	\$48.23	\$11.00	\$15.50	\$0.00	\$74.73
	06/01/2019	\$49.33	\$11.00	\$15.50	\$0.00	\$75.83
	12/01/2019	\$50.48	\$11.00	\$15.50	\$0.00	\$76.98
	06/01/2020	\$51.58	\$11.00	\$15.50	\$0.00	\$78.08
	12/01/2020	\$52.73	\$11.00	\$15.50	\$0.00	\$79.23
	06/01/2021	\$53.83	\$11.00	\$15.50	\$0.00	\$80.33
	12/01/2021	\$54.98	\$11.00	\$15.50	\$0.00	\$81.48
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
PUMP OPERATOR (DEWATERING, OTHER) <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2018	\$31.90	\$11.00	\$15.50	\$0.00	\$58.40
	12/01/2018	\$32.68	\$11.00	\$15.50	\$0.00	\$59.18
	06/01/2019	\$33.43	\$11.00	\$15.50	\$0.00	\$59.93
	12/01/2019	\$34.22	\$11.00	\$15.50	\$0.00	\$60.72
	06/01/2020	\$34.97	\$11.00	\$15.50	\$0.00	\$61.47
	12/01/2020	\$35.75	\$11.00	\$15.50	\$0.00	\$62.25
	06/01/2021	\$36.50	\$11.00	\$15.50	\$0.00	\$63.00
	12/01/2021	\$37.29	\$11.00	\$15.50	\$0.00	\$63.79
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
READY-MIX CONCRETE DRIVER <i>TEAMSTERS LOCAL 59</i>	06/01/2008	\$19.00	\$5.10	\$4.21	\$0.00	\$28.31
RECLAIMERS <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2018	\$46.61	\$11.00	\$15.50	\$0.00	\$73.11
	12/01/2018	\$47.75	\$11.00	\$15.50	\$0.00	\$74.25
	06/01/2019	\$48.84	\$11.00	\$15.50	\$0.00	\$75.34
	12/01/2019	\$49.98	\$11.00	\$15.50	\$0.00	\$76.48
	06/01/2020	\$51.06	\$11.00	\$15.50	\$0.00	\$77.56
	12/01/2020	\$52.20	\$11.00	\$15.50	\$0.00	\$78.70
	06/01/2021	\$53.29	\$11.00	\$15.50	\$0.00	\$79.79
	12/01/2021	\$54.43	\$11.00	\$15.50	\$0.00	\$80.93
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
RIDE-ON MOTORIZED BUGGY OPERATOR <i>LABORERS - ZONE 2</i>	06/01/2018	\$33.50	\$7.70	\$14.02	\$0.00	\$55.22
	12/01/2018	\$34.34	\$7.70	\$14.02	\$0.00	\$56.06
	06/01/2019	\$35.21	\$7.70	\$14.02	\$0.00	\$56.93
	12/01/2019	\$36.07	\$7.70	\$14.02	\$0.00	\$57.79
	06/01/2020	\$36.96	\$7.70	\$14.02	\$0.00	\$58.68
	12/01/2020	\$37.85	\$7.70	\$14.02	\$0.00	\$59.57
	06/01/2021	\$38.77	\$7.70	\$14.02	\$0.00	\$60.49
	12/01/2021	\$39.68	\$7.70	\$14.02	\$0.00	\$61.40
For apprentice rates see "Apprentice- LABORER"						
ROLLER/SPREADER/MULCHING MACHINE <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2018	\$46.61	\$11.00	\$15.50	\$0.00	\$73.11
	12/01/2018	\$47.75	\$11.00	\$15.50	\$0.00	\$74.25
	06/01/2019	\$48.84	\$11.00	\$15.50	\$0.00	\$75.34
	12/01/2019	\$49.98	\$11.00	\$15.50	\$0.00	\$76.48
	06/01/2020	\$51.06	\$11.00	\$15.50	\$0.00	\$77.56
	12/01/2020	\$52.20	\$11.00	\$15.50	\$0.00	\$78.70
	06/01/2021	\$53.29	\$11.00	\$15.50	\$0.00	\$79.79
	12/01/2021	\$54.43	\$11.00	\$15.50	\$0.00	\$80.93
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
ROOFER (Inc.Roofers Waterproofing &Roofers Dampproofg)	08/01/2018	\$42.36	\$11.35	\$15.90	\$0.00	\$69.61
ROOFERS LOCAL 33	02/01/2019	\$43.51	\$11.35	\$15.90	\$0.00	\$70.76

Apprentice - ROOFER - Local 33

Effective Date - 08/01/2018

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$21.18	\$11.35	\$3.69	\$0.00	\$36.22
2	60	\$25.42	\$11.35	\$15.90	\$0.00	\$52.67
3	65	\$27.53	\$11.35	\$15.90	\$0.00	\$54.78
4	75	\$31.77	\$11.35	\$15.90	\$0.00	\$59.02
5	85	\$36.01	\$11.35	\$15.90	\$0.00	\$63.26

Effective Date - 02/01/2019

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$21.76	\$11.35	\$3.69	\$0.00	\$36.80
2	60	\$26.11	\$11.35	\$15.90	\$0.00	\$53.36
3	65	\$28.28	\$11.35	\$15.90	\$0.00	\$55.53
4	75	\$32.63	\$11.35	\$15.90	\$0.00	\$59.88
5	85	\$36.98	\$11.35	\$15.90	\$0.00	\$64.23

Notes: ** 1:5, 2:6-10, the 1:10; Reroofing: 1:4, then 1:1
Step 1 is 2000 hrs.; Steps 2-5 are 1000 hrs.
(Hot Pitch Mechanics' receive \$1.00 hr. above ROOFER)

Apprentice to Journeyworker Ratio:**

ROOFER SLATE / TILE / PRECAST CONCRETE	08/01/2018	\$42.61	\$11.35	\$15.90	\$0.00	\$69.86
ROOFERS LOCAL 33	02/01/2019	\$43.76	\$11.35	\$15.90	\$0.00	\$71.01

For apprentice rates see "Apprentice- ROOFER"

SHEETMETAL WORKER	04/01/2018	\$34.96	\$12.20	\$16.30	\$1.90	\$65.36
SHEETMETAL WORKERS LOCAL 17 - B	10/01/2018	\$35.46	\$12.20	\$16.30	\$1.90	\$65.86
	04/01/2019	\$35.96	\$12.20	\$16.30	\$1.90	\$66.36

Classification

Effective Date Base Wage Health Pension Supplemental
Unemployment Total Rate

Apprentice - SHEET METAL WORKER - Local 17-B
Effective Date - 04/01/2018

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$13.98	\$12.20	\$4.02	\$0.92	\$31.12
2	45	\$15.73	\$12.20	\$4.52	\$0.99	\$33.44
3	50	\$17.48	\$12.20	\$10.48	\$1.23	\$41.39
4	55	\$19.23	\$12.20	\$10.48	\$1.28	\$43.19
5	60	\$20.98	\$12.20	\$13.37	\$1.40	\$47.95
6	65	\$22.72	\$12.20	\$13.61	\$1.46	\$49.99
7	70	\$24.47	\$12.20	\$13.85	\$1.52	\$52.04
8	75	\$26.22	\$12.20	\$14.10	\$1.58	\$54.10
9	80	\$27.97	\$12.20	\$14.34	\$1.64	\$56.15
10	85	\$29.72	\$12.20	\$14.58	\$1.70	\$58.20

Effective Date - 10/01/2018

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$14.18	\$12.20	\$4.02	\$0.93	\$31.33
2	45	\$15.96	\$12.20	\$4.52	\$1.00	\$33.68
3	50	\$17.73	\$12.20	\$10.48	\$1.23	\$41.64
4	55	\$19.50	\$12.20	\$10.48	\$1.29	\$43.47
5	60	\$21.28	\$12.20	\$13.37	\$1.41	\$48.26
6	65	\$23.05	\$12.20	\$13.61	\$1.47	\$50.33
7	70	\$24.82	\$12.20	\$13.85	\$1.53	\$52.40
8	75	\$26.60	\$12.20	\$14.10	\$1.59	\$54.49
9	80	\$28.37	\$12.20	\$14.34	\$1.65	\$56.56
10	85	\$30.14	\$12.20	\$14.58	\$1.71	\$58.63

Notes:
Apprentice to Journeyworker Ratio:1:3

SIGN ERECTOR	06/01/2013	\$25.81	\$7.07	\$7.05	\$0.00	\$39.93
PAINTERS LOCAL 35 - ZONE 2						

Classification
Effective Date
Base Wage
Health
Pension
**Supplemental
Unemployment**
Total Rate
Apprentice - SIGN ERECTOR - Local 35 Zone 2
Effective Date - 06/01/2013

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$12.91	\$7.07	\$0.00	\$0.00	\$19.98
2	55	\$14.20	\$7.07	\$2.45	\$0.00	\$23.72
3	60	\$15.49	\$7.07	\$2.45	\$0.00	\$25.01
4	65	\$16.78	\$7.07	\$2.45	\$0.00	\$26.30
5	70	\$18.07	\$7.07	\$7.05	\$0.00	\$32.19
6	75	\$19.36	\$7.07	\$7.05	\$0.00	\$33.48
7	80	\$20.65	\$7.07	\$7.05	\$0.00	\$34.77
8	85	\$21.94	\$7.07	\$7.05	\$0.00	\$36.06
9	90	\$23.23	\$7.07	\$7.05	\$0.00	\$37.35

Notes:

Steps are 4 mos.

Apprentice to Journeyworker Ratio:1:1

SPECIALIZED EARTH MOVING EQUIP < 35 TONS TEAMSTERS JOINT COUNCIL NO. 10 ZONE B	12/01/2016	\$32.44	\$10.91	\$10.89	\$0.00	\$54.24
SPECIALIZED EARTH MOVING EQUIP > 35 TONS TEAMSTERS JOINT COUNCIL NO. 10 ZONE B	12/01/2016	\$32.73	\$10.91	\$10.89	\$0.00	\$54.53
SPRINKLER FITTER SPRINKLER FITTERS LOCAL 550 - (Section B) Zone 2	03/01/2018	\$52.00	\$9.12	\$18.15	\$0.00	\$79.27
	10/01/2018	\$52.68	\$9.12	\$18.90	\$0.00	\$80.70
	01/01/2019	\$52.18	\$9.47	\$19.10	\$0.00	\$80.75
	03/01/2019	\$53.53	\$9.47	\$19.10	\$0.00	\$82.10
	10/01/2019	\$54.88	\$9.47	\$19.10	\$0.00	\$83.45
	03/01/2020	\$56.23	\$9.47	\$19.10	\$0.00	\$84.80
	10/01/2020	\$57.58	\$9.47	\$19.10	\$0.00	\$86.15
	03/01/2021	\$58.93	\$9.47	\$19.10	\$0.00	\$87.50

Apprentice - SPRINKLER FITTER - Local 550 (Section B) Zone 2**Effective Date -** 03/01/2018

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	35	\$18.20	\$9.12	\$8.90	\$0.00	\$36.22
2	40	\$20.80	\$9.12	\$8.90	\$0.00	\$38.82
3	45	\$23.40	\$9.12	\$8.90	\$0.00	\$41.42
4	50	\$26.00	\$9.12	\$8.90	\$0.00	\$44.02
5	55	\$28.60	\$9.12	\$8.90	\$0.00	\$46.62
6	60	\$31.20	\$9.12	\$10.40	\$0.00	\$50.72
7	65	\$33.80	\$9.12	\$10.40	\$0.00	\$53.32
8	70	\$36.40	\$9.12	\$10.40	\$0.00	\$55.92
9	75	\$39.00	\$9.12	\$10.40	\$0.00	\$58.52
10	80	\$41.60	\$9.12	\$10.40	\$0.00	\$61.12

Effective Date - 10/01/2018

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	35	\$18.44	\$9.12	\$8.90	\$0.00	\$36.46
2	40	\$21.07	\$9.12	\$8.90	\$0.00	\$39.09
3	45	\$23.71	\$9.12	\$8.90	\$0.00	\$41.73
4	50	\$26.34	\$9.12	\$8.90	\$0.00	\$44.36
5	55	\$28.97	\$9.12	\$8.90	\$0.00	\$46.99
6	60	\$31.61	\$9.12	\$10.40	\$0.00	\$51.13
7	65	\$34.24	\$9.12	\$10.40	\$0.00	\$53.76
8	70	\$36.88	\$9.12	\$10.40	\$0.00	\$56.40
9	75	\$39.51	\$9.12	\$10.40	\$0.00	\$59.03
10	80	\$42.14	\$9.12	\$10.40	\$0.00	\$61.66

Notes: Apprentice entered prior 9/30/10;
40/45/50/55/60/65/70/75/80/85
Steps are 850 hours

Apprentice to Journeyworker Ratio:1:3

STEAM BOILER OPERATOR
OPERATING ENGINEERS LOCAL 4

06/01/2018	\$46.61	\$11.00	\$15.50	\$0.00	\$73.11
12/01/2018	\$47.75	\$11.00	\$15.50	\$0.00	\$74.25
06/01/2019	\$48.84	\$11.00	\$15.50	\$0.00	\$75.34
12/01/2019	\$49.98	\$11.00	\$15.50	\$0.00	\$76.48
06/01/2020	\$51.06	\$11.00	\$15.50	\$0.00	\$77.56
12/01/2020	\$52.20	\$11.00	\$15.50	\$0.00	\$78.70
06/01/2021	\$53.29	\$11.00	\$15.50	\$0.00	\$79.79
12/01/2021	\$54.43	\$11.00	\$15.50	\$0.00	\$80.93

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
TAMPERS, SELF-PROPELLED OR TRACTOR DRAWN <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2018	\$46.61	\$11.00	\$15.50	\$0.00	\$73.11
	12/01/2018	\$47.75	\$11.00	\$15.50	\$0.00	\$74.25
	06/01/2019	\$48.84	\$11.00	\$15.50	\$0.00	\$75.34
	12/01/2019	\$49.98	\$11.00	\$15.50	\$0.00	\$76.48
	06/01/2020	\$51.06	\$11.00	\$15.50	\$0.00	\$77.56
	12/01/2020	\$52.20	\$11.00	\$15.50	\$0.00	\$78.70
	06/01/2021	\$53.29	\$11.00	\$15.50	\$0.00	\$79.79
	12/01/2021	\$54.43	\$11.00	\$15.50	\$0.00	\$80.93

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

TELECOMMUNICATION TECHNICIAN <i>ELECTRICIANS LOCAL 223</i>	09/01/2018	\$34.76	\$9.65	\$10.81	\$0.00	\$55.22
	03/01/2019	\$35.25	\$9.90	\$11.14	\$0.00	\$56.29
	09/01/2019	\$35.78	\$10.15	\$11.45	\$0.00	\$57.38
	03/01/2020	\$36.27	\$10.40	\$11.78	\$0.00	\$58.45

Apprentice - TELECOMMUNICATION TECHNICIAN - Local 223

Effective Date - 09/01/2018

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

Notes: See Electrician Apprentice Wages

Steps are 750hrs

Telecom Apprentice Wages shall be the same as the Electrician Apprentice Wages

Apprentice to Journeyworker Ratio:2:3***

TERRAZZO FINISHERS <i>BRICKLAYERS LOCAL 3 - MARBLE & TILE</i>	08/01/2018	\$51.85	\$10.75	\$20.66	\$0.00	\$83.26
	02/01/2019	\$52.49	\$10.75	\$20.66	\$0.00	\$83.90
	08/01/2019	\$53.84	\$10.75	\$20.80	\$0.00	\$85.39
	02/01/2020	\$54.48	\$10.75	\$20.80	\$0.00	\$86.03
	08/01/2020	\$55.83	\$10.75	\$20.95	\$0.00	\$87.53
	02/01/2021	\$56.47	\$10.75	\$20.95	\$0.00	\$88.17
	08/01/2021	\$57.87	\$10.75	\$21.11	\$0.00	\$89.73
	02/01/2022	\$58.46	\$10.75	\$21.11	\$0.00	\$90.32

Classification
Effective Date
Base Wage
Health
Pension
**Supplemental
Unemployment**
Total Rate
Apprentice - TERRAZZO FINISHER - Local 3 Marble & Tile
Effective Date - 08/01/2018

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$25.93	\$10.75	\$20.03	\$0.00	\$56.71
2	60	\$31.11	\$10.75	\$20.03	\$0.00	\$61.89
3	70	\$36.30	\$10.75	\$20.03	\$0.00	\$67.08
4	80	\$41.48	\$10.75	\$20.03	\$0.00	\$72.26
5	90	\$46.67	\$10.75	\$20.03	\$0.00	\$77.45

Effective Date - 02/01/2019

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$26.25	\$10.75	\$20.03	\$0.00	\$57.03
2	60	\$31.49	\$10.75	\$20.03	\$0.00	\$62.27
3	70	\$36.74	\$10.75	\$20.03	\$0.00	\$67.52
4	80	\$41.99	\$10.75	\$20.03	\$0.00	\$72.77
5	90	\$47.24	\$10.75	\$20.03	\$0.00	\$78.02

Notes:
Apprentice to Journeyworker Ratio:1:3

TEST BORING DRILLER	06/01/2018	\$39.35	\$7.70	\$15.40	\$0.00	\$62.45
LABORERS - FOUNDATION AND MARINE	12/01/2018	\$40.30	\$7.70	\$15.40	\$0.00	\$63.40
	06/01/2019	\$41.30	\$7.70	\$15.40	\$0.00	\$64.40
	12/01/2019	\$42.30	\$7.70	\$15.40	\$0.00	\$65.40
	06/01/2020	\$43.29	\$7.70	\$15.40	\$0.00	\$66.39
	12/01/2020	\$44.27	\$7.70	\$15.40	\$0.00	\$67.37
	06/01/2021	\$45.29	\$7.70	\$15.40	\$0.00	\$68.39
	12/01/2021	\$46.30	\$7.70	\$15.40	\$0.00	\$69.40

For apprentice rates see "Apprentice- LABORER"

TEST BORING DRILLER HELPER	06/01/2018	\$38.07	\$7.70	\$15.40	\$0.00	\$61.17
LABORERS - FOUNDATION AND MARINE	12/01/2018	\$39.02	\$7.70	\$15.40	\$0.00	\$62.12
	06/01/2019	\$40.02	\$7.70	\$15.40	\$0.00	\$63.12
	12/01/2019	\$41.02	\$7.70	\$15.40	\$0.00	\$64.12
	06/01/2020	\$42.01	\$7.70	\$15.40	\$0.00	\$65.11
	12/01/2020	\$42.99	\$7.70	\$15.40	\$0.00	\$66.09
	06/01/2021	\$44.01	\$7.70	\$15.40	\$0.00	\$67.11
	12/01/2021	\$45.02	\$7.70	\$15.40	\$0.00	\$68.12

For apprentice rates see "Apprentice- LABORER"

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
TEST BORING LABORER <i>LABORERS - FOUNDATION AND MARINE</i>	06/01/2018	\$37.95	\$7.70	\$15.40	\$0.00	\$61.05
	12/01/2018	\$38.90	\$7.70	\$15.40	\$0.00	\$62.00
	06/01/2019	\$39.90	\$7.70	\$15.40	\$0.00	\$63.00
	12/01/2019	\$40.90	\$7.70	\$15.40	\$0.00	\$64.00
	06/01/2020	\$41.89	\$7.70	\$15.40	\$0.00	\$64.99
	12/01/2020	\$42.87	\$7.70	\$15.40	\$0.00	\$65.97
	06/01/2021	\$43.89	\$7.70	\$15.40	\$0.00	\$66.99
	12/01/2021	\$44.90	\$7.70	\$15.40	\$0.00	\$68.00
For apprentice rates see "Apprentice- LABORER"						
TRACTORS/PORTABLE STEAM GENERATORS <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2018	\$46.61	\$11.00	\$15.50	\$0.00	\$73.11
	12/01/2018	\$47.75	\$11.00	\$15.50	\$0.00	\$74.25
	06/01/2019	\$48.84	\$11.00	\$15.50	\$0.00	\$75.34
	12/01/2019	\$49.98	\$11.00	\$15.50	\$0.00	\$76.48
	06/01/2020	\$51.06	\$11.00	\$15.50	\$0.00	\$77.56
	12/01/2020	\$52.20	\$11.00	\$15.50	\$0.00	\$78.70
	06/01/2021	\$53.29	\$11.00	\$15.50	\$0.00	\$79.79
	12/01/2021	\$54.43	\$11.00	\$15.50	\$0.00	\$80.93
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
TRAILERS FOR EARTH MOVING EQUIPMENT <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE B</i>	12/01/2016	\$33.02	\$10.91	\$10.89	\$0.00	\$54.82
TUNNEL WORK - COMPRESSED AIR <i>LABORERS (COMPRESSED AIR)</i>	06/01/2018	\$50.23	\$7.70	\$15.80	\$0.00	\$73.73
	12/01/2018	\$51.18	\$7.70	\$15.80	\$0.00	\$74.68
	06/01/2019	\$52.18	\$7.70	\$15.80	\$0.00	\$75.68
	12/01/2019	\$53.18	\$7.70	\$15.80	\$0.00	\$76.68
	06/01/2020	\$54.17	\$7.70	\$15.80	\$0.00	\$77.67
	12/01/2020	\$55.15	\$7.70	\$15.80	\$0.00	\$78.65
	06/01/2021	\$56.17	\$7.70	\$15.80	\$0.00	\$79.67
	12/01/2021	\$57.18	\$7.70	\$15.80	\$0.00	\$80.68
For apprentice rates see "Apprentice- LABORER"						
TUNNEL WORK - COMPRESSED AIR (HAZ. WASTE) <i>LABORERS (COMPRESSED AIR)</i>	06/01/2018	\$52.23	\$7.70	\$15.80	\$0.00	\$75.73
	12/01/2018	\$53.18	\$7.70	\$15.80	\$0.00	\$76.68
	06/01/2019	\$54.18	\$7.70	\$15.80	\$0.00	\$77.68
	12/01/2019	\$55.18	\$7.70	\$15.80	\$0.00	\$78.68
	06/01/2020	\$56.17	\$7.70	\$15.80	\$0.00	\$79.67
	12/01/2020	\$57.15	\$7.70	\$15.80	\$0.00	\$80.65
	06/01/2021	\$58.17	\$7.70	\$15.80	\$0.00	\$81.67
	12/01/2021	\$59.18	\$7.70	\$15.80	\$0.00	\$82.68
For apprentice rates see "Apprentice- LABORER"						
TUNNEL WORK - FREE AIR <i>LABORERS (FREE AIR TUNNEL)</i>	06/01/2018	\$42.30	\$7.70	\$15.80	\$0.00	\$65.80
	12/01/2018	\$43.25	\$7.70	\$15.80	\$0.00	\$66.75
	06/01/2019	\$44.25	\$7.70	\$15.80	\$0.00	\$67.75
	12/01/2019	\$45.25	\$7.70	\$15.80	\$0.00	\$68.75
	06/01/2020	\$46.24	\$7.70	\$15.80	\$0.00	\$69.74
	12/01/2020	\$47.22	\$7.70	\$15.80	\$0.00	\$70.72
	06/01/2021	\$48.24	\$7.70	\$15.80	\$0.00	\$71.74
	12/01/2021	\$49.25	\$7.70	\$15.80	\$0.00	\$72.75
For apprentice rates see "Apprentice- LABORER"						

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
TUNNEL WORK - FREE AIR (HAZ. WASTE) <i>LABORERS (FREE AIR TUNNEL)</i>	06/01/2018	\$44.30	\$7.70	\$15.80	\$0.00	\$67.80
	12/01/2018	\$45.25	\$7.70	\$15.80	\$0.00	\$68.75
	06/01/2019	\$46.25	\$7.70	\$15.80	\$0.00	\$69.75
	12/01/2019	\$47.25	\$7.70	\$15.80	\$0.00	\$70.75
	06/01/2020	\$48.24	\$7.70	\$15.80	\$0.00	\$71.74
	12/01/2020	\$49.22	\$7.70	\$15.80	\$0.00	\$72.72
	06/01/2021	\$50.24	\$7.70	\$15.80	\$0.00	\$73.74
	12/01/2021	\$51.25	\$7.70	\$15.80	\$0.00	\$74.75
For apprentice rates see "Apprentice- LABORER"						
VAC-HAUL <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE B</i>	12/01/2016	\$32.44	\$10.91	\$10.89	\$0.00	\$54.24
WAGON DRILL OPERATOR <i>LABORERS - ZONE 2</i>	06/01/2018	\$33.50	\$7.70	\$14.02	\$0.00	\$55.22
	12/01/2018	\$34.34	\$7.70	\$14.02	\$0.00	\$56.06
	06/01/2019	\$35.21	\$7.70	\$14.02	\$0.00	\$56.93
	12/01/2019	\$36.07	\$7.70	\$14.02	\$0.00	\$57.79
	06/01/2020	\$36.96	\$7.70	\$14.02	\$0.00	\$58.68
	12/01/2020	\$37.85	\$7.70	\$14.02	\$0.00	\$59.57
	06/01/2021	\$38.77	\$7.70	\$14.02	\$0.00	\$60.49
	12/01/2021	\$39.68	\$7.70	\$14.02	\$0.00	\$61.40
For apprentice rates see "Apprentice- LABORER"						
WASTE WATER PUMP OPERATOR <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2018	\$47.08	\$11.00	\$15.50	\$0.00	\$73.58
	12/01/2018	\$48.23	\$11.00	\$15.50	\$0.00	\$74.73
	06/01/2019	\$49.33	\$11.00	\$15.50	\$0.00	\$75.83
	12/01/2019	\$50.48	\$11.00	\$15.50	\$0.00	\$76.98
	06/01/2020	\$51.58	\$11.00	\$15.50	\$0.00	\$78.08
	12/01/2020	\$52.73	\$11.00	\$15.50	\$0.00	\$79.23
	06/01/2021	\$53.83	\$11.00	\$15.50	\$0.00	\$80.33
	12/01/2021	\$54.98	\$11.00	\$15.50	\$0.00	\$81.48
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
WATER METER INSTALLER <i>PLUMBERS & PIPEFITTERS LOCAL 51</i>	09/01/2018	\$42.04	\$10.00	\$18.20	\$0.00	\$70.24
For apprentice rates see "Apprentice- PLUMBER/PIPEFITTER" or "PLUMBER/GASFITTER"						
Op Eng Marine (Dredging Work)						
BOAT OPERATOR <i>OPERATING ENGINEERS - MARINE DIVISION</i>	10/01/2017	\$29.26	\$7.63	\$3.30	\$0.00	\$40.19
CERTIFIED WELDER <i>OPERATING ENGINEERS - MARINE DIVISION</i>	10/01/2017	\$31.09	\$7.63	\$3.60	\$0.00	\$42.32
CHIEF WELDER/ CHIEF MATE <i>OPERATING ENGINEERS - MARINE DIVISION</i>	10/01/2017	\$33.02	\$7.63	\$3.60	\$0.00	\$44.25
DERRICK / SPIDER / SPILLBARGE OPERATOR <i>OPERATING ENGINEERS - MARINE DIVISION</i>	10/01/2017	\$33.02	\$7.63	\$3.60	\$0.00	\$44.25
DRAG BARGE OPERATOR / WELDER / MATE <i>OPERATING ENGINEERS - MARINE DIVISION</i>	10/01/2017	\$30.24	\$7.63	\$3.30	\$0.00	\$41.17
ENGINEER / ELECTRICIAN <i>OPERATING ENGINEERS - MARINE DIVISION</i>	10/01/2017	\$33.02	\$7.63	\$3.60	\$0.00	\$44.25
LICENSED BOAT OPERATOR <i>OPERATING ENGINEERS - MARINE DIVISION</i>	10/01/2017	\$33.02	\$7.63	\$3.60	\$0.00	\$44.25

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
LICENSED TUG OPERATOR OVER 1000HP <i>OPERATING ENGINEERS - MARINE DIVISION</i>	10/01/2017	\$38.18	\$7.63	\$3.60	\$0.00	\$49.41
MAINTENANCE ENGINEER <i>OPERATING ENGINEERS - MARINE DIVISION</i>	10/01/2017	\$33.03	\$7.63	\$3.60	\$0.00	\$44.26
OILER - MARINE DIVISION <i>OPERATING ENGINEERS - MARINE DIVISION</i>	10/01/2017	\$24.30	\$7.63	\$3.00	\$0.00	\$34.93
OPERATOR / LEVERMAN <i>OPERATING ENGINEERS - MARINE DIVISION</i>	10/01/2017	\$38.18	\$7.63	\$3.60	\$0.00	\$49.41
RODMAN / SCOWMAN <i>OPERATING ENGINEERS - MARINE DIVISION</i>	10/01/2017	\$24.30	\$7.63	\$3.00	\$0.00	\$34.93
SHOREMAN / DECKHAND <i>OPERATING ENGINEERS - MARINE DIVISION</i>	10/01/2017	\$24.30	\$7.63	\$3.00	\$0.00	\$34.93
Rental of Equipment - East						
(2 AXLE) DRIVER - EQUIPMENT <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE B</i>	12/01/2016	\$32.15	\$10.91	\$0.00	\$0.00	\$43.06
(3 AXLE) DRIVER - EQUIPMENT <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE B</i>	12/01/2016	\$32.22	\$10.91	\$0.00	\$0.00	\$43.13
(4 & 5 AXLE) DRIVER - EQUIPMENT <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE B</i>	12/01/2016	\$32.34	\$10.91	\$0.00	\$0.00	\$43.25
ADS/SUBMERSIBLE PILOT <i>PILE DRIVER LOCAL 56 (ZONE 1)</i>	08/01/2018	\$97.80	\$9.90	\$0.00	\$0.00	\$107.70
	08/01/2019	\$102.78	\$9.90	\$0.00	\$0.00	\$112.68
For apprentice rates see "Apprentice- PILE DRIVER"						
ASPHALT/CONCRETE/CRUSHER PLANT-ON SITE <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2018	\$47.08	\$11.00	\$0.00	\$0.00	\$58.08
	12/01/2018	\$48.23	\$11.00	\$0.00	\$0.00	\$59.23
	06/01/2019	\$49.33	\$11.00	\$0.00	\$0.00	\$60.33
	12/01/2019	\$50.48	\$11.00	\$0.00	\$0.00	\$61.48
	06/01/2020	\$51.58	\$11.00	\$0.00	\$0.00	\$62.58
	12/01/2020	\$52.73	\$11.00	\$0.00	\$0.00	\$63.73
	06/01/2021	\$53.83	\$11.00	\$0.00	\$0.00	\$64.83
	12/01/2021	\$54.98	\$11.00	\$0.00	\$0.00	\$65.98
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
BACKHOE/FRONT-END LOADER <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2018	\$47.08	\$11.00	\$0.00	\$0.00	\$58.08
	12/01/2018	\$48.23	\$11.00	\$0.00	\$0.00	\$59.23
	06/01/2019	\$49.33	\$11.00	\$0.00	\$0.00	\$60.33
	12/01/2019	\$50.48	\$11.00	\$0.00	\$0.00	\$61.48
	06/01/2020	\$51.58	\$11.00	\$0.00	\$0.00	\$62.58
	12/01/2020	\$52.73	\$11.00	\$0.00	\$0.00	\$63.73
	06/01/2021	\$53.83	\$11.00	\$0.00	\$0.00	\$64.83
	12/01/2021	\$54.98	\$11.00	\$0.00	\$0.00	\$65.98
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
BULLDOZER/GRADER/SCRAPER <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2018	\$46.61	\$11.00	\$0.00	\$0.00	\$57.61
	12/01/2018	\$47.75	\$11.00	\$0.00	\$0.00	\$58.75
	06/01/2019	\$48.84	\$11.00	\$0.00	\$0.00	\$59.84
	12/01/2019	\$49.98	\$11.00	\$0.00	\$0.00	\$60.98
	06/01/2020	\$51.06	\$11.00	\$0.00	\$0.00	\$62.06
	12/01/2020	\$52.20	\$11.00	\$0.00	\$0.00	\$63.20
	06/01/2021	\$53.29	\$11.00	\$0.00	\$0.00	\$64.29
	12/01/2021	\$54.43	\$11.00	\$0.00	\$0.00	\$65.43

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
CLAM SHELLS/SLURRY BUCKETS/HEADING MACHINES <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2018	\$69.67	\$11.00	\$0.00	\$0.00	\$80.67
	12/01/2018	\$71.30	\$11.00	\$0.00	\$0.00	\$82.30
	06/01/2019	\$72.87	\$11.00	\$0.00	\$0.00	\$83.87
	12/01/2019	\$74.50	\$11.00	\$0.00	\$0.00	\$85.50
	06/01/2020	\$76.06	\$11.00	\$0.00	\$0.00	\$87.06
	12/01/2020	\$77.69	\$11.00	\$0.00	\$0.00	\$88.69
	06/01/2021	\$79.25	\$11.00	\$0.00	\$0.00	\$90.25
	12/01/2021	\$80.88	\$11.00	\$0.00	\$0.00	\$91.88
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
COMPRESSOR OPERATOR <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2018	\$31.90	\$11.00	\$0.00	\$0.00	\$42.90
	12/01/2018	\$32.68	\$11.00	\$0.00	\$0.00	\$43.68
	06/01/2019	\$33.43	\$11.00	\$0.00	\$0.00	\$44.43
	12/01/2019	\$34.22	\$11.00	\$0.00	\$0.00	\$45.22
	06/01/2020	\$34.97	\$11.00	\$0.00	\$0.00	\$45.97
	12/01/2020	\$35.75	\$11.00	\$0.00	\$0.00	\$46.75
	06/01/2021	\$36.50	\$11.00	\$0.00	\$0.00	\$47.50
	12/01/2021	\$37.29	\$11.00	\$0.00	\$0.00	\$48.29
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
DIVER <i>PILE DRIVER LOCAL 56 (ZONE 1)</i>	08/01/2018	\$65.20	\$9.90	\$0.00	\$0.00	\$75.10
	08/01/2019	\$68.52	\$9.90	\$0.00	\$0.00	\$78.42
For apprentice rates see "Apprentice- PILE DRIVER"						
DIVER TENDER <i>PILE DRIVER LOCAL 56 (ZONE 1)</i>	08/01/2018	\$46.57	\$9.90	\$0.00	\$0.00	\$56.47
	08/01/2019	\$48.94	\$9.90	\$0.00	\$0.00	\$58.84
For apprentice rates see "Apprentice- PILE DRIVER"						
DIVER TENDER (EFFLUENT) <i>PILE DRIVER LOCAL 56 (ZONE 1)</i>	08/01/2018	\$69.86	\$9.90	\$0.00	\$0.00	\$79.76
	08/01/2019	\$73.41	\$9.90	\$0.00	\$0.00	\$83.31
For apprentice rates see "Apprentice- PILE DRIVER"						
DIVER/SLURRY (EFFLUENT) <i>PILE DRIVER LOCAL 56 (ZONE 1)</i>	08/01/2018	\$97.80	\$9.90	\$0.00	\$0.00	\$107.70
	08/01/2019	\$102.78	\$9.90	\$0.00	\$0.00	\$112.68
For apprentice rates see "Apprentice- PILE DRIVER"						
FLAGGER & SIGNALER <i>LABORERS - ZONE 2</i>	06/01/2018	\$21.50	\$7.70	\$0.00	\$0.00	\$29.20
	12/01/2018	\$22.50	\$7.70	\$0.00	\$0.00	\$30.20
	06/01/2019	\$22.50	\$7.70	\$0.00	\$0.00	\$30.20
	12/01/2019	\$23.50	\$7.70	\$0.00	\$0.00	\$31.20
	06/01/2020	\$23.50	\$7.70	\$0.00	\$0.00	\$31.20
	12/01/2020	\$24.50	\$7.70	\$0.00	\$0.00	\$32.20
	06/01/2021	\$24.50	\$7.70	\$0.00	\$0.00	\$32.20
	12/01/2021	\$24.50	\$7.70	\$0.00	\$0.00	\$32.20
For apprentice rates see "Apprentice- LABORER"						

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
FORK LIFT/CHERRY PICKER <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2018	\$47.08	\$11.00	\$0.00	\$0.00	\$58.08
	12/01/2018	\$48.23	\$11.00	\$0.00	\$0.00	\$59.23
	06/01/2019	\$49.33	\$11.00	\$0.00	\$0.00	\$60.33
	12/01/2019	\$50.48	\$11.00	\$0.00	\$0.00	\$61.48
	06/01/2020	\$51.58	\$11.00	\$0.00	\$0.00	\$62.58
	12/01/2020	\$52.73	\$11.00	\$0.00	\$0.00	\$63.73
	06/01/2021	\$53.83	\$11.00	\$0.00	\$0.00	\$64.83
	12/01/2021	\$54.98	\$11.00	\$0.00	\$0.00	\$65.98
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
GENERATOR/LIGHTING PLANT/HEATERS <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2018	\$31.90	\$11.00	\$0.00	\$0.00	\$42.90
	12/01/2018	\$32.68	\$11.00	\$0.00	\$0.00	\$43.68
	06/01/2019	\$33.43	\$11.00	\$0.00	\$0.00	\$44.43
	12/01/2019	\$34.22	\$11.00	\$0.00	\$0.00	\$45.22
	06/01/2020	\$34.97	\$11.00	\$0.00	\$0.00	\$45.97
	12/01/2020	\$35.75	\$11.00	\$0.00	\$0.00	\$46.75
	06/01/2021	\$36.50	\$11.00	\$0.00	\$0.00	\$47.50
	12/01/2021	\$37.29	\$11.00	\$0.00	\$0.00	\$48.29
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
HOISTING ENGINEER/CRANES/GRADALLS <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2018	\$47.08	\$11.00	\$0.00	\$0.00	\$58.08
	12/01/2018	\$48.23	\$11.00	\$0.00	\$0.00	\$59.23
	06/01/2019	\$49.33	\$11.00	\$0.00	\$0.00	\$60.33
	12/01/2019	\$50.48	\$11.00	\$0.00	\$0.00	\$61.48
	06/01/2020	\$51.58	\$11.00	\$0.00	\$0.00	\$62.58
	12/01/2020	\$52.73	\$11.00	\$0.00	\$0.00	\$63.73
	06/01/2021	\$53.83	\$11.00	\$0.00	\$0.00	\$64.83
	12/01/2021	\$54.98	\$11.00	\$0.00	\$0.00	\$65.98

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - OPERATING ENGINEERS - Local 4
Effective Date - 06/01/2018

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	55	\$25.89	\$11.00	\$0.00	\$0.00	\$36.89
2	60	\$28.25	\$11.00	\$0.00	\$0.00	\$39.25
3	65	\$30.60	\$11.00	\$0.00	\$0.00	\$41.60
4	70	\$32.96	\$11.00	\$0.00	\$0.00	\$43.96
5	75	\$35.31	\$11.00	\$0.00	\$0.00	\$46.31
6	80	\$37.66	\$11.00	\$0.00	\$0.00	\$48.66
7	85	\$40.02	\$11.00	\$0.00	\$0.00	\$51.02
8	90	\$42.37	\$11.00	\$0.00	\$0.00	\$53.37

Effective Date - 12/01/2018

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	55	\$26.53	\$11.00	\$0.00	\$0.00	\$37.53
2	60	\$28.94	\$11.00	\$0.00	\$0.00	\$39.94
3	65	\$31.35	\$11.00	\$0.00	\$0.00	\$42.35
4	70	\$33.76	\$11.00	\$0.00	\$0.00	\$44.76
5	75	\$36.17	\$11.00	\$0.00	\$0.00	\$47.17
6	80	\$38.58	\$11.00	\$0.00	\$0.00	\$49.58
7	85	\$41.00	\$11.00	\$0.00	\$0.00	\$52.00
8	90	\$43.41	\$11.00	\$0.00	\$0.00	\$54.41

Notes:
Apprentice to Journeyworker Ratio:1:6

LABORER	06/01/2018	\$33.25	\$7.70	\$0.00	\$0.00	\$40.95
LABORERS - ZONE 2	12/01/2018	\$34.09	\$7.70	\$0.00	\$0.00	\$41.79
	06/01/2019	\$34.96	\$7.70	\$0.00	\$0.00	\$42.66
	12/01/2019	\$35.82	\$7.70	\$0.00	\$0.00	\$43.52
	06/01/2020	\$36.71	\$7.70	\$0.00	\$0.00	\$44.41
	12/01/2020	\$37.60	\$7.70	\$0.00	\$0.00	\$45.30
	06/01/2021	\$38.52	\$7.70	\$0.00	\$0.00	\$46.22
	12/01/2021	\$39.43	\$7.70	\$0.00	\$0.00	\$47.13

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - LABORER - Zone 2
Effective Date - 06/01/2018

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$19.95	\$7.70	\$0.00	\$0.00	\$27.65
2	70	\$23.28	\$7.70	\$0.00	\$0.00	\$30.98
3	80	\$26.60	\$7.70	\$0.00	\$0.00	\$34.30
4	90	\$29.93	\$7.70	\$0.00	\$0.00	\$37.63

Effective Date - 12/01/2018

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$20.45	\$7.70	\$0.00	\$0.00	\$28.15
2	70	\$23.86	\$7.70	\$0.00	\$0.00	\$31.56
3	80	\$27.27	\$7.70	\$0.00	\$0.00	\$34.97
4	90	\$30.68	\$7.70	\$0.00	\$0.00	\$38.38

Notes:
Apprentice to Journeyworker Ratio:1:5

OILER (OTHER THAN TRUCK CRANES,GRADALLS) OPERATING ENGINEERS LOCAL 4	06/01/2018	\$23.14	\$11.00	\$0.00	\$0.00	\$34.14
	12/01/2018	\$23.71	\$11.00	\$0.00	\$0.00	\$34.71
	06/01/2019	\$24.26	\$11.00	\$0.00	\$0.00	\$35.26
	12/01/2019	\$24.83	\$11.00	\$0.00	\$0.00	\$35.83
	06/01/2020	\$25.38	\$11.00	\$0.00	\$0.00	\$36.38
	12/01/2020	\$25.95	\$11.00	\$0.00	\$0.00	\$36.95
	06/01/2021	\$26.50	\$11.00	\$0.00	\$0.00	\$37.50
	12/01/2021	\$27.08	\$11.00	\$0.00	\$0.00	\$38.08
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
OILER (TRUCK CRANES, GRADALLS) OPERATING ENGINEERS LOCAL 4	06/01/2018	\$27.40	\$11.00	\$0.00	\$0.00	\$38.40
	12/01/2018	\$28.07	\$11.00	\$0.00	\$0.00	\$39.07
	06/01/2019	\$28.72	\$11.00	\$0.00	\$0.00	\$39.72
	12/01/2019	\$29.39	\$11.00	\$0.00	\$0.00	\$40.39
	06/01/2020	\$30.04	\$11.00	\$0.00	\$0.00	\$41.04
	12/01/2020	\$30.72	\$11.00	\$0.00	\$0.00	\$41.72
	06/01/2021	\$31.36	\$11.00	\$0.00	\$0.00	\$42.36
	12/01/2021	\$32.04	\$11.00	\$0.00	\$0.00	\$43.04
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
OTHER POWER DRIVEN EQUIPMENT - CLASS II OPERATING ENGINEERS LOCAL 4	06/01/2018	\$46.61	\$11.00	\$0.00	\$0.00	\$57.61
	12/01/2018	\$47.75	\$11.00	\$0.00	\$0.00	\$58.75
	06/01/2019	\$48.84	\$11.00	\$0.00	\$0.00	\$59.84
	12/01/2019	\$49.98	\$11.00	\$0.00	\$0.00	\$60.98
	06/01/2020	\$51.06	\$11.00	\$0.00	\$0.00	\$62.06
	12/01/2020	\$52.20	\$11.00	\$0.00	\$0.00	\$63.20
	06/01/2021	\$53.29	\$11.00	\$0.00	\$0.00	\$64.29
	12/01/2021	\$54.43	\$11.00	\$0.00	\$0.00	\$65.43

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
PANEL & PICKUP TRUCKS DRIVER <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE B</i>	12/01/2012	\$30.28	\$9.07	\$0.00	\$0.00	\$39.35
POWER SHOVEL/DERRICK/TRENCHING MACHINE <i>OPERATING ENGINEERS LOCAL 4</i>						
	06/01/2018	\$47.08	\$11.00	\$0.00	\$0.00	\$58.08
	12/01/2018	\$48.23	\$11.00	\$0.00	\$0.00	\$59.23
	06/01/2019	\$49.33	\$11.00	\$0.00	\$0.00	\$60.33
	12/01/2019	\$50.48	\$11.00	\$0.00	\$0.00	\$61.48
	06/01/2020	\$51.58	\$11.00	\$0.00	\$0.00	\$62.58
	12/01/2020	\$52.73	\$11.00	\$0.00	\$0.00	\$63.73
	06/01/2021	\$53.83	\$11.00	\$0.00	\$0.00	\$64.83
	12/01/2021	\$54.98	\$11.00	\$0.00	\$0.00	\$65.98
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
PUMP OPERATOR (CONCRETE) <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2018	\$47.08	\$11.00	\$0.00	\$0.00	\$58.08
	12/01/2018	\$48.23	\$11.00	\$0.00	\$0.00	\$59.23
	06/01/2019	\$49.33	\$11.00	\$0.00	\$0.00	\$60.33
	12/01/2019	\$50.48	\$11.00	\$0.00	\$0.00	\$61.48
	06/01/2020	\$51.58	\$11.00	\$0.00	\$0.00	\$62.58
	12/01/2020	\$52.73	\$11.00	\$0.00	\$0.00	\$63.73
	06/01/2021	\$53.83	\$11.00	\$0.00	\$0.00	\$64.83
	12/01/2021	\$54.98	\$11.00	\$0.00	\$0.00	\$65.98
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
PUMP OPERATOR (DEWATERING, OTHER) <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2018	\$31.90	\$11.00	\$0.00	\$0.00	\$42.90
	12/01/2018	\$32.68	\$11.00	\$0.00	\$0.00	\$43.68
	06/01/2019	\$33.43	\$11.00	\$0.00	\$0.00	\$44.43
	12/01/2019	\$34.22	\$11.00	\$0.00	\$0.00	\$45.22
	06/01/2020	\$34.97	\$11.00	\$0.00	\$0.00	\$45.97
	12/01/2020	\$35.75	\$11.00	\$0.00	\$0.00	\$46.75
	06/01/2021	\$36.50	\$11.00	\$0.00	\$0.00	\$47.50
	12/01/2021	\$37.29	\$11.00	\$0.00	\$0.00	\$48.29
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
ROLLER/SPREADER/MULCHING MACHINE <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2018	\$46.61	\$11.00	\$0.00	\$0.00	\$57.61
	12/01/2018	\$47.75	\$11.00	\$0.00	\$0.00	\$58.75
	06/01/2019	\$48.84	\$11.00	\$0.00	\$0.00	\$59.84
	12/01/2019	\$49.98	\$11.00	\$0.00	\$0.00	\$60.98
	06/01/2020	\$51.06	\$11.00	\$0.00	\$0.00	\$62.06
	12/01/2020	\$52.20	\$11.00	\$0.00	\$0.00	\$63.20
	06/01/2021	\$53.29	\$11.00	\$0.00	\$0.00	\$64.29
	12/01/2021	\$54.43	\$11.00	\$0.00	\$0.00	\$65.43
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
SPECIALIZED EARTH MOVING EQUIP < 35 TONS <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE B</i>	12/01/2016	\$32.44	\$10.91	\$0.00	\$0.00	\$43.35
SPECIALIZED EARTH MOVING EQUIP > 35 TONS <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE B</i>	12/01/2016	\$32.73	\$10.91	\$0.00	\$0.00	\$43.64

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
TRACTORS/PORTABLE STEAM GENERATORS <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2018	\$46.61	\$11.00	\$0.00	\$0.00	\$57.61
	12/01/2018	\$47.75	\$11.00	\$0.00	\$0.00	\$58.75
	06/01/2019	\$48.84	\$11.00	\$0.00	\$0.00	\$59.84
	12/01/2019	\$49.98	\$11.00	\$0.00	\$0.00	\$60.98
	06/01/2020	\$51.06	\$11.00	\$0.00	\$0.00	\$62.06
	12/01/2020	\$52.20	\$11.00	\$0.00	\$0.00	\$63.20
	06/01/2021	\$53.29	\$11.00	\$0.00	\$0.00	\$64.29
	12/01/2021	\$54.43	\$11.00	\$0.00	\$0.00	\$65.43
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
TRAILERS FOR EARTH MOVING EQUIPMENT <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE B</i>	12/01/2016	\$33.02	\$10.91	\$0.00	\$0.00	\$43.93
TREE TRIMMER <i>OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104</i>	01/31/2016	\$18.51	\$3.55	\$0.00	\$0.00	\$22.06
This classification applies only to tree work done: (a) for a utility company, R.E.A. cooperative, or railroad or coal mining company, and (b) for the purpose of operating, maintaining, or repairing the utility company's equipment, and (c) by a person who is using hand or mechanical cutting methods and is not on the ground. This classification does not apply to wholesale tree removal.						
TREE TRIMMER GROUNDMAN <i>OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104</i>	01/31/2016	\$16.32	\$3.55	\$0.00	\$0.00	\$19.87
This classification applies only to tree work done: (a) for a utility company, R.E.A. cooperative, or railroad or coal mining company, and (b) for the purpose of operating, maintaining, or repairing the utility company's equipment, and (c) by a person who is using hand or mechanical cutting methods and is on the ground. This classification does not apply to wholesale tree removal.						
VAC-HAUL/CATCH BASIN CLEANING <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE B</i>	12/01/2016	\$32.44	\$10.91	\$0.00	\$0.00	\$43.35

Additional Apprentice Information:

Minimum wage rates for apprentices employed on public works projects are listed above as a percentage of the pre-determined hourly wage rate established by the Commissioner under the provisions of the M.G.L. c. 149, ss. 26-27D. Apprentice ratios are established by the Division of Apprenticeship Training pursuant to M.G.L. c. 23, ss. 11E-11L.

All apprentices must be registered with the Division of Apprenticeship Training in accordance with M.G.L. c. 23, ss. 11E-11L.

All steps are six months (1000 hours.)

Ratios are expressed in allowable number of apprentices to journeymen or fraction thereof, unless otherwise specified.

** Multiple ratios are listed in the comment field.

*** APP to JM; 1:1, 2:2, 2:3, 3:4, 4:4, 4:5, 4:6, 5:7, 6:7, 6:8, 6:9, 7:10, 8:10, 8:11, 8:12, 9:13, 10:13, 10:14, etc.

**** APP to JM; 1:1, 1:2, 2:3, 2:4, 3:5, 4:6, 4:7, 5:8, 6:9, 6:10, 7:11, 8:12, 8:13, 9:14, 10:15, 10:16, etc.

ATTACHMENT B

ENVIRONMENTAL PERMITS

ORDER OF CONDITIONS
Nantucket Conservation Commission
DEP File #SE48-2866

ATTACHMENTS



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 5 – Order of Conditions

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
And the Town of Nantucket Wetlands Bylaw Chapter 136

Provided by MassDEP:
SE48- 2866

MassDEP File #

eDEP Transaction #

Nantucket

City/Town

A. General Information

1. From: Nantucket
Conservation Commission

2. This issuance is for
(check one): a. ☒ Order of Conditions b. ☐ Amended Order of Conditions

3. To: Applicant:

a. First Name Town of Nantucket b. Last Name
c. Organization 16 Broad Street
d. Mailing Address Nantucket MA 02554
e. City/Town f. State g. Zip Code

4. Property Owner (if different from applicant):

Same As Applicant
a. First Name b. Last Name
c. Organization
d. Mailing Address
e. City/Town f. State g. Zip Code

5. Project Location:

Dredge site: Polp's Harbor; Nourishment Stockpile Sites: 188 Madaket
Rd/ New South Rd

a. Street Address

Dredge Site: Map 19 Lot 03 Stockpile Sites: (1) 58-1 (2) Map 78 Lot 4-1

c. Assessors Map/Plat Number

Nantucket

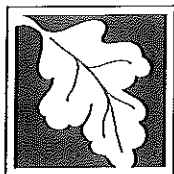
b. City/Town

d. Parcel/Lot Number

Latitude and Longitude, if known:

Dredge: 41d18'15.44" Stockpile:
41d16'53.5" Stockpile 2: 41d15'25"
d. Latitude

70d01'13.05" 70d10'07" 70d02'55"
e. Longitude



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

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Provided by MassDEP:
SE48- 2866
MassDEP File #

eDEP Transaction #
Nantucket
City/Town

A. General Information (cont.)

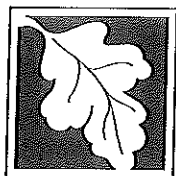
6. Property recorded at the Registry of Deeds for (attach additional information if more than one parcel):
Nantucket
a. County
18364
b. Certificate Number (if registered land)
c. Book
d. Page
7. Dates: 02/19/16 03/23/2016 03/23/2016
a. Date Notice of Intent Filed b. Date Public Hearing Closed c. Date of Issuance
8. Final Approved Plans and Other Documents (attach additional plan or document references as needed):
Proposed Maintenance Dredging Project Polpis Harbor, Nantucket, MA
a. Plan Title
CLE Engineering
b. Prepared By
02/17/16
c. Signed and Stamped by
Carlos G. Peña
Horizontal 1" 30' / Vertical 1"3'
d. Final Revision Date
e. Scale
Land based Dredging: Access Plan
f. Additional Plan or Document Title
g. Date
03/18/16

B. Findings

1. Findings pursuant to the Massachusetts Wetlands Protection Act:
Following the review of the above-referenced Notice of Intent and based on the information provided in this application and presented at the public hearing, this Commission finds that the areas in which work is proposed is significant to the following interests of the Wetlands Protection Act (the Act). Check all that apply:
- | | | |
|---|--|---|
| a. <input type="checkbox"/> Public Water Supply | b. <input checked="" type="checkbox"/> Land Containing Shellfish | c. <input type="checkbox"/> Prevention of Pollution |
| d. <input type="checkbox"/> Private Water Supply | e. <input checked="" type="checkbox"/> Fisheries | f. <input checked="" type="checkbox"/> Protection of Wildlife Habitat |
| g. <input type="checkbox"/> Groundwater Supply | h. <input checked="" type="checkbox"/> Storm Damage Prevention | i. <input checked="" type="checkbox"/> Flood Control |
| j. <input checked="" type="checkbox"/> Wetland Scenic Views (bylaw) | k. <input checked="" type="checkbox"/> Recreation (Bylaw) | |
2. This Commission hereby finds the project, as proposed, is: (check one of the following boxes)

Approved subject to:

- a. ☒ the following conditions which are necessary in accordance with the performance standards set forth in the wetlands regulations. This Commission orders that all work shall be performed in accordance with the Notice of Intent referenced above, the following General Conditions, and any other special conditions attached to this Order. To the extent that the following conditions modify or differ from the plans, specifications, or other proposals submitted with the Notice of Intent, these conditions shall control.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 5 – Order of Conditions

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
And the Town of Nantucket Wetlands Bylaw Chapter 136

Provided by MassDEP:
SE48- 2866
MassDEP File #

eDEP Transaction #
Nantucket
City/Town

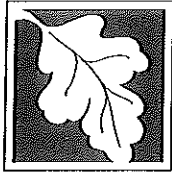
B. Findings (cont.)

Denied because:

- b. ☐ the proposed work cannot be conditioned to meet the performance standards set forth in the wetland regulations. Therefore, work on this project may not go forward unless and until a new Notice of Intent is submitted which provides measures which are adequate to protect the interests of the Act, and a final Order of Conditions is issued. **A description of the performance standards which the proposed work cannot meet is attached to this Order.**
- c. ☐ the information submitted by the applicant is not sufficient to describe the site, the work, or the effect of the work on the interests identified in the Wetlands Protection Act. Therefore, work on this project may not go forward unless and until a revised Notice of Intent is submitted which provides sufficient information and includes measures which are adequate to protect the Act's interests, and a final Order of Conditions is issued. **A description of the specific information which is lacking and why it is necessary is attached to this Order as per 310 CMR 10.05(6)(c).**
3. ☐ Buffer Zone Impacts: Shortest distance between limit of project disturbance and the wetland resource area specified in 310 CMR 10.02(1)(a) _____ a. linear feet

Inland Resource Area Impacts: Check all that apply below. (For Approvals Only)

Resource Area	Proposed Alteration	Permitted Alteration	Proposed Replacement	Permitted Replacement
4. <input type="checkbox"/> Bank	_____ a. linear feet	_____ b. linear feet	_____ c. linear feet	_____ d. linear feet
5. <input type="checkbox"/> Bordering Vegetated Wetland	_____ a. square feet	_____ b. square feet	_____ c. square feet	_____ d. square feet
6. <input type="checkbox"/> Land Under Waterbodies and Waterways	_____ a. square feet _____ e. c/y dredged	_____ b. square feet _____ f. c/y dredged	_____ c. square feet	_____ d. square feet
7. <input type="checkbox"/> Bordering Land Subject to Flooding	_____ a. square feet	_____ b. square feet	_____ c. square feet	_____ d. square feet
Cubic Feet Flood Storage	_____ e. cubic feet	_____ f. cubic feet	_____ g. cubic feet	_____ h. cubic feet
8. <input type="checkbox"/> Isolated Land Subject to Flooding	_____ a. square feet	_____ b. square feet		
Cubic Feet Flood Storage	_____ c. cubic feet	_____ d. cubic feet	_____ e. cubic feet	_____ f. cubic feet
9. <input type="checkbox"/> Riverfront Area	_____ a. total sq. feet	_____ b. total sq. feet		
Sq ft within 100 ft	_____ c. square feet	_____ d. square feet	_____ e. square feet	_____ f. square feet
Sq ft between 100-200 ft	_____ g. square feet	_____ h. square feet	_____ i. square feet	_____ j. square feet



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 5 – Order of Conditions

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
And the Town of Nantucket Wetlands Bylaw Chapter 136

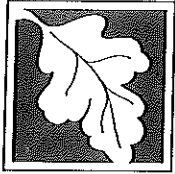
Provided by MassDEP:
SE48- 2866
MassDEP File #

eDEP Transaction #
Nantucket
City/Town

B. Findings (cont.)

Coastal Resource Area Impacts: Check all that apply below. (For Approvals Only)

	Proposed Alteration	Permitted Alteration	Proposed Replacement	Permitted Replacement
10. <input type="checkbox"/> Designated Port Areas	Indicate size under Land Under the Ocean, below			
11. <input checked="" type="checkbox"/> Land Under the Ocean	<u>+/-56,908sf</u> a. square feet	<u> </u> b. square feet		
	<u>+/-5,544cy</u> c. c/y dredged	<u> </u> d. c/y dredged		
12. <input type="checkbox"/> Barrier Beaches	Indicate size under Coastal Beaches and/or Coastal Dunes below			
13. <input checked="" type="checkbox"/> Coastal Beaches	<u>+/-12,131sf(intertidal)</u> a. square feet	<u> </u> b. square feet	<u>0 cu yd</u> c. nourishment	<u> </u> d. nourishment
14. <input type="checkbox"/> Coastal Dunes	<u> </u> a. square feet	<u> </u> b. square feet	<u> </u> c. nourishment	<u> </u> d. nourishment
15. <input type="checkbox"/> Coastal Banks	<u> </u> a. linear feet	<u> </u> b. linear feet		
16. <input type="checkbox"/> Rocky Intertidal Shores	<u> </u> a. square feet	<u> </u> b. square feet		
17. <input type="checkbox"/> Salt Marshes	<u> </u> a. square feet	<u> </u> b. square feet	<u> </u> c. square feet	<u> </u> d. square feet
18. <input type="checkbox"/> Land Under Salt Ponds	<u> </u> a. square feet	<u> </u> b. square feet		
	<u> </u> c. c/y dredged	<u> </u> d. c/y dredged		
19. <input checked="" type="checkbox"/> Land Containing Shellfish	<u>+/-51,414sf</u> a. square feet	<u> </u> b. square feet	<u> </u> c. square feet	<u> </u> d. square feet
20. <input type="checkbox"/> Fish Runs	Indicate size under Coastal Banks, Inland Bank, Land Under the Ocean, and/or inland Land Under Waterbodies and Waterways, above			
	<u> </u> a. c/y dredged	<u> </u> b. c/y dredged		
21. <input type="checkbox"/> Land Subject to Coastal Storm Flowage	<u> </u> a. square feet	<u> </u> b. square feet		



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B. Findings (cont.)

22. ☐ Restoration/Enhancement *:

a. square feet of BWV

b. square feet of salt marsh

23. ☐ Stream Crossing(s):

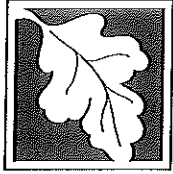
a. number of new stream crossings

b. number of replacement stream crossings

C. General Conditions Under Massachusetts Wetlands Protection Act

The following conditions are only applicable to Approved projects.

1. Failure to comply with all conditions stated herein, and with all related statutes and other regulatory measures, shall be deemed cause to revoke or modify this Order.
2. The Order does not grant any property rights or any exclusive privileges; it does not authorize any injury to private property or invasion of private rights.
3. This Order does not relieve the permittee or any other person of the necessity of complying with all other applicable federal, state, or local statutes, ordinances, bylaws, or regulations.
4. The work authorized hereunder shall be completed within three years from the date of this Order unless either of the following apply:
 - a. the work is a maintenance dredging project as provided for in the Act; or
 - b. the time for completion has been extended to a specified date more than three years, but less than five years, from the date of issuance. If this Order is intended to be valid for more than three years, the extension date and the special circumstances warranting the extended time period are set forth as a special condition in this Order.
5. This Order may be extended by the issuing authority for one or more periods of up to three years each upon application to the issuing authority at least 30 days prior to the expiration date of the Order.
6. If this Order constitutes an Amended Order of Conditions, this Amended Order of Conditions does not extend the issuance date of the original Final Order of Conditions and the Order will expire on **03/23/19** unless extended in writing by the Department.
7. Any fill used in connection with this project shall be clean fill. Any fill shall contain no trash, refuse, rubbish, or debris, including but not limited to lumber, bricks, plaster, wire, lath, paper, cardboard, pipe, tires, ashes, refrigerators, motor vehicles, or parts of any of the foregoing.
8. This Order is not final until all administrative appeal periods from this Order have elapsed, or if such an appeal has been taken, until all proceedings before the Department have been completed.



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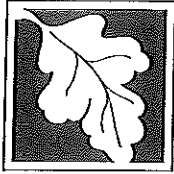
Nantucket

City/Town

C. General Conditions Under Massachusetts Wetlands Protection Act (cont.)

9. No work shall be undertaken until the Order has become final and then has been recorded in the Registry of Deeds or the Land Court for the district in which the land is located, within the chain of title of the affected property. In the case of recorded land, the Final Order shall also be noted in the Registry's Grantor Index under the name of the owner of the land upon which the proposed work is to be done. In the case of the registered land, the Final Order shall also be noted on the Land Court Certificate of Title of the owner of the land upon which the proposed work is done. The recording information shall be submitted to the Conservation Commission on the form at the end of this Order, which form must be stamped by the Registry of Deeds, prior to the commencement of work.
10. A sign shall be displayed at the site not less than two square feet or more than three square feet in size bearing the words,

"Massachusetts Department of Environmental Protection" [or, "MassDEP"]
"File Number SE48- 2866 "
11. Where the Department of Environmental Protection is requested to issue a Superseding Order, the Conservation Commission shall be a party to all agency proceedings and hearings before MassDEP.
12. Upon completion of the work described herein, the applicant shall submit a Request for Certificate of Compliance (WPA Form 8A) to the Conservation Commission.
13. The work shall conform to the plans and special conditions referenced in this order.
14. Any change to the plans identified in Condition #13 above shall require the applicant to inquire of the Conservation Commission in writing whether the change is significant enough to require the filing of a new Notice of Intent.
15. The Agent or members of the Conservation Commission and the Department of Environmental Protection shall have the right to enter and inspect the area subject to this Order at reasonable hours to evaluate compliance with the conditions stated in this Order, and may require the submittal of any data deemed necessary by the Conservation Commission or Department for that evaluation.
16. This Order of Conditions shall apply to any successor in interest or successor in control of the property subject to this Order and to any contractor or other person performing work conditioned by this Order.
17. Prior to the start of work, and if the project involves work adjacent to a Bordering Vegetated Wetland, the boundary of the wetland in the vicinity of the proposed work area shall be marked by wooden stakes or flagging. Once in place, the wetland boundary markers shall be maintained until a Certificate of Compliance has been issued by the Conservation Commission.



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C. General Conditions Under Massachusetts Wetlands Protection Act (cont.)

18. All sedimentation barriers shall be maintained in good repair until all disturbed areas have been fully stabilized with vegetation or other means. At no time shall sediments be deposited in a wetland or water body. During construction, the applicant or his/her designee shall inspect the erosion controls on a daily basis and shall remove accumulated sediments as needed. The applicant shall immediately control any erosion problems that occur at the site and shall also immediately notify the Conservation Commission, which reserves the right to require additional erosion and/or damage prevention controls it may deem necessary. Sedimentation barriers shall serve as the limit of work unless another limit of work line has been approved by this Order.

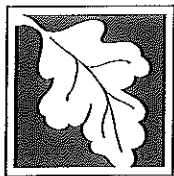
NOTICE OF STORMWATER CONTROL AND MAINTENANCE REQUIREMENTS

19. The work associated with this Order (the "Project") is (1) ☐ is not (2) ☒ subject to the Massachusetts Stormwater Standards. If the work is subject to the Stormwater Standards, then the project is subject to the following conditions:

a) All work, including site preparation, land disturbance, construction and redevelopment, shall be implemented in accordance with the construction period pollution prevention and erosion and sedimentation control plan and, if applicable, the Stormwater Pollution Prevention Plan required by the National Pollution Discharge Elimination System Construction General Permit as required by Stormwater Condition 8. Construction period erosion, sedimentation and pollution control measures and best management practices (BMPs) shall remain in place until the site is fully stabilized.

b) No stormwater runoff may be discharged to the post-construction stormwater BMPs unless and until a Registered Professional Engineer provides a Certification that:

- i. all construction period BMPs have been removed or will be removed by a date certain specified in the Certification. For any construction period BMPs intended to be converted to post construction operation for stormwater attenuation, recharge, and/or treatment, the conversion is allowed by the MassDEP Stormwater Handbook BMP specifications and that the BMP has been properly cleaned or prepared for post construction operation, including removal of all construction period sediment trapped in inlet and outlet control structures;
- ii. as-built final construction BMP plans are included, signed and stamped by a Registered Professional Engineer, certifying the site is fully stabilized;
- iii. any illicit discharges to the stormwater management system have been removed, as per the requirements of Stormwater Standard 10;
- iv. all post-construction stormwater BMPs are installed in accordance with the plans (including all planting plans) approved by the issuing authority, and have been inspected to ensure that they are not damaged and that they are in proper working condition;
- v. any vegetation associated with post-construction BMPs is suitably established to withstand erosion.



Massachusetts Department of Environmental Protection
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WPA Form 5 – Order of Conditions

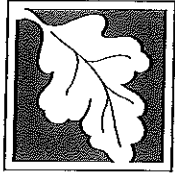
Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
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C. General Conditions Under Massachusetts Wetlands Protection Act (cont.)

- c) The landowner is responsible for BMP maintenance until the issuing authority is notified that another party has legally assumed responsibility for BMP maintenance. Prior to requesting a Certificate of Compliance, or Partial Certificate of Compliance, the responsible party (defined in General Condition 18(e)) shall execute and submit to the issuing authority an Operation and Maintenance Compliance Statement ("O&M Statement") for the Stormwater BMPs identifying the party responsible for implementing the stormwater BMP Operation and Maintenance Plan ("O&M Plan") and certifying the following: *i.*) the O&M Plan is complete and will be implemented upon receipt of the Certificate of Compliance, and *ii.*) the future responsible parties shall be notified in writing of their ongoing legal responsibility to operate and maintain the stormwater management BMPs and implement the Stormwater Pollution Prevention Plan.
- d) Post-construction pollution prevention and source control shall be implemented in accordance with the long-term pollution prevention plan section of the approved Stormwater Report and, if applicable, the Stormwater Pollution Prevention Plan required by the National Pollution Discharge Elimination System Multi-Sector General Permit.
- e) Unless and until another party accepts responsibility, the landowner, or owner of any drainage easement, assumes responsibility for maintaining each BMP. To overcome this presumption, the landowner of the property must submit to the issuing authority a legally binding agreement of record, acceptable to the issuing authority, evidencing that another entity has accepted responsibility for maintaining the BMP, and that the proposed responsible party shall be treated as a permittee for purposes of implementing the requirements of Conditions 18(f) through 18(k) with respect to that BMP. Any failure of the proposed responsible party to implement the requirements of Conditions 18(f) through 18(k) with respect to that BMP shall be a violation of the Order of Conditions or Certificate of Compliance. In the case of stormwater BMPs that are serving more than one lot, the legally binding agreement shall also identify the lots that will be serviced by the stormwater BMPs. A plan and easement deed that grants the responsible party access to perform the required operation and maintenance must be submitted along with the legally binding agreement.
- f) The responsible party shall operate and maintain all stormwater BMPs in accordance with the design plans, the O&M Plan, and the requirements of the Massachusetts Stormwater Handbook.



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Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
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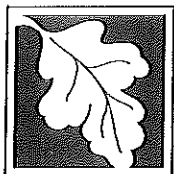
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C. General Conditions Under Massachusetts Wetlands Protection Act (cont.)

- g) The responsible party shall:
1. Maintain an operation and maintenance log for the last three (3) consecutive calendar years of inspections, repairs, maintenance and/or replacement of the stormwater management system or any part thereof, and disposal (for disposal the log shall indicate the type of material and the disposal location);
 2. Make the maintenance log available to MassDEP and the Conservation Commission ("Commission") upon request; and
 3. Allow members and agents of the MassDEP and the Commission to enter and inspect the site to evaluate and ensure that the responsible party is in compliance with the requirements for each BMP established in the O&M Plan approved by the issuing authority.
- h) All sediment or other contaminants removed from stormwater BMPs shall be disposed of in accordance with all applicable federal, state, and local laws and regulations.
- i) Illicit discharges to the stormwater management system as defined in 310 CMR 10.04 are prohibited.
- j) The stormwater management system approved in the Order of Conditions shall not be changed without the prior written approval of the issuing authority.
- k) Areas designated as qualifying pervious areas for the purpose of the Low Impact Site Design Credit (as defined in the MassDEP Stormwater Handbook, Volume 3, Chapter 1, Low Impact Development Site Design Credits) shall not be altered without the prior written approval of the issuing authority.
- l) Access for maintenance, repair, and/or replacement of BMPs shall not be withheld. Any fencing constructed around stormwater BMPs shall include access gates and shall be at least six inches above grade to allow for wildlife passage.

Special Conditions (if you need more space for additional conditions, please attach a text document):



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D. Findings Under Municipal Wetlands Bylaw or Ordinance

1. Is a municipal wetlands bylaw or ordinance applicable? ☒ Yes ☐ No
2. The Nantucket hereby finds (check one that applies):
Conservation Commission

- a. ☐ that the proposed work cannot be conditioned to meet the standards set forth in a municipal ordinance or bylaw, specifically:

1. Municipal Ordinance or Bylaw

2. Citation

Therefore, work on this project may not go forward unless and until a revised Notice of Intent is submitted which provides measures which are adequate to meet these standards, and a final Order of Conditions is issued.

- b. ☐ that the following additional conditions are necessary to comply with a municipal ordinance or bylaw:

1. Municipal Ordinance or Bylaw

2. Citation

3. The Commission orders that all work shall be performed in accordance with the following conditions and with the Notice of Intent referenced above. To the extent that the following conditions modify or differ from the plans, specifications, or other proposals submitted with the Notice of Intent, the conditions shall control.

The special conditions relating to municipal ordinance or bylaw are as follows (if you need more space for additional conditions, attach a text document):

Please view additional findings and conditions page(s)



Town of Nantucket, Massachusetts
WPA Form 5 – Order of Conditions
The Town of Nantucket Bylaw Chapter 136

DEP File Number:

SE48-2866

Provided by DEP

B1. Additional Conditions

The Town of Nantucket Conservation Commission has found it necessary to include these additional conditions as a standard part of every Order. If the condition applies, then the corresponding box will be checked:

- ☒ 1. Pursuant to General Condition Number 8, this Order of Conditions must be registered with the Registry of Deeds for Nantucket, and proof of recording shall be submitted to the Commission prior to the commencement of any work approved in this Order.
- ☒ 2. No work approved under this Order shall take place until all administrative appeal periods from the Order have elapsed, or, if an appeal has been filed, until all proceedings have been completed.
- ☒ 3. The landowner, applicant, and/or the contractor will notify the Commission in writing five days prior to the start of work. The letter shall state the name, address, and telephone number of the project supervisor who will be responsible for insuring onsite compliance with this Order. (All erosion/sedimentation control devices shall be installed BEFORE the start of work.)
- ☒ 4. Prior to any activity at the site, a snow fence, siltation fence or a line of straw bales shall be staked as shown on the plan of record. After the fence or straw bales are installed, notice shall be given to the Nantucket Conservation Commission. **No work shall begin on the site for 72 hours after said notice is given; so as to allow Commission members time to inspect all siltation devices.** The snow fence, siltation fence, or straw bale line erected to prevent siltation, erosion, filling of the wetland, and trap windblown debris during construction, will also serve as a limit of the activity for work crews. It shall remain in good repair during all phases of construction, and it shall not be removed until all soils are stabilized and revegetated or until permission to remove it is given by the Commission.
- ☒ 5. An as-built plan, signed and stamped by a registered professional engineer or land surveyor in the Commonwealth of Massachusetts, and having the same scale as the final approved plans, shall be submitted to the Commission at the same time as a written request for a Certificate of Compliance, and shall specify how, if at all, the completed plan differs from the final approved plan. The as-built plan shall include, but not be limited to, the following: any/culvert inverts for inflow and outfalls; pipe slope, size, and composition; location of any other drainage structures and their composition; limits of fill or alteration; location of all structures and pavement within 100 feet of the wetland; the edge of the wetland; the grade contours within 100 feet of the wetland.
- ☒ 6. Members, employees, and agents of the Commission shall have the right to enter and inspect the premises to evaluate compliance with the conditions and performance standards stated in this Order, the Massachusetts Wetlands Protection Act, and pertinent Massachusetts regulations (310CMR10:00 through 10:99). The Commission may require the submittal of any data deemed necessary by the Commission for that evaluation.
- ☒ 7. The applicant, owners, successors, or assignees shall be responsible for maintaining any on-site drainage structures and outfalls, assuring the lasting integrity of vegetative cover on the site, and monitoring of site activities so as to prevent erosion, siltation, sedimentation, chemical contamination, or other detrimental impact to any on-site or off-site resource area. It shall be the responsibility of the property owner of record to ensure compliance with the maintenance conditions required by this Order.



Town of Nantucket, Massachusetts
WPA Form 5 – Order of Conditions
The Town of Nantucket Bylaw Chapter 136

DEP File Number:

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Provided by DEP

B1. Additional Conditions (cont.)

- ☒ 8. This document shall be included in all construction contracts and subcontracts dealing with the work proposed and shall supersede other contract requirements.
- ☒ 9. A complete copy of this permit, including its drawings, Special Conditions, and any Amendments shall be available at the work site whenever work is being performed. The permittee shall provide a copy of this permit to all contractors, subcontractors, and other personnel performing work relating to this project in order to assure full knowledge and compliance with the permit's terms and conditions.
- ☒ 10. Natural vegetation between the wetland edge and upland edge of the Undisturbed Buffer shall be left intact. Within 48 hours of project completion, weather permitting, all disturbed areas shall be replanted as previously approved by the Commission. There shall be at least a 25-foot undisturbed buffer on the upland side of the wetland boundary, unless otherwise specified by this Order. This shall be an ongoing Condition that shall survive the expiration of this permit and shall be so noted on the Certificate of Compliance.
- ☒ 11. To minimize adverse effects on wildlife and water resources, the use of any pesticide or fertilizer requires explicit permission to be granted by the Commission. This shall be an ongoing Condition that shall survive the expiration of this permit, and shall be so noted on the Certificate of Compliance.
- ☒ 12. In all cases, no part of any structure, including decks, stairs, cantilevers, etc., may be closer than 50 feet from the approved wetland boundary unless otherwise specified in this Order. This shall be an ongoing Condition that shall survive the expiration of this permit and shall be so noted on the Certificate of Compliance.
- ☒ 13. Any refuse material found on the site shall be disposed of at an approved landfill and in no case may these materials be buried or disposed of in or near a wetland.
- ☒ 14. This Order of Conditions shall apply to any successor in interest or successor in control of the property.
- ☒ 15. No underground petroleum product storage tanks are allowed within 100 feet of any wetland or within any velocity (V) flood zone as indicated on the most recent FEMA floodplain maps.
- ☒ 16. No work under this Order of Conditions may proceed until the applicant has filed all necessary permits and applications with:
Board of Health, ZBA, HDC, Building Inspector, Army Corps of Engineers, DEP, Waterways, MNH, etc.
- ☒ 17. All construction and alterations must comply with the above referenced plans and the Conditions of this Order. Any changes intended to be made in the plans or in the work shall require the applicant to file a new Notice of Intent, or to inquire of the Commission in writing whether the change is substantial enough to require a new filing. No change in plan or work under this filing is permissible without a new Notice of Intent, or permission from the Commission.

FINDINGS and ADDITIONAL CONDITIONS

Massachusetts Wetlands Protection Act (MGL Chapter 131, Section 40)

Town of Nantucket Wetlands Bylaw (Chapter 136)

Address: Polpis Harbor Entrance Channel
Assessor's Map and Parcel: N/A
Property Owner: Town of Nantucket
Applicant: Town of Nantucket
DEP File Number: SE48-2866
Filing Date: 2/19/2016
Date Hearing Closed: 3/23/2016
Date Orders Issued: 3/23/2016
Plan of Record Information: Proposed Maintenance Dredging Project polpis Harbor, Nantucket, MA, dated 2/17/2016, and stamped by Carlos G. Pena, P.E.

Permit Overview:

This order permits the maintenance dredging of the existing entrance channel within Land Under the Ocean and Land Containing Shellfish with off- site stockpiling of excavated material. Waivers are not required for this project.

Additional Findings:

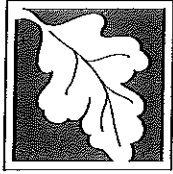
1. The area falls inside mapped habitat areas and did not require NHESP review.

In addition to the General Conditions contained elsewhere in this document, the Commission includes the following Special Conditions pursuant to MGLCh131s40 and the Town of Nantucket Wetlands Protection Bylaw, Chapter 136:

18. All work shall be performed in accordance with the Site and Work Description contained within the Notice of Intent and plan notes set out on the plan of record, provided project narratives, and protocols.
19. Silt curtains shall be installed to best contain the work area.
20. No dredging shall occur during the period April 1 – August 31.
21. No equipment may be present on the beach April 1- -August 31.
22. All beneficial reuse of dredged material, if located within Estimated and/or Priority Habitat for state-listed species, is subject to Division review and approval.
23. Upon filing for renewal, extension, or amendment of the orders of Conditions, the applicant shall contact the Division for written response regarding impacts to Resource Area habitat of state-listed wildlife.
24. Dredging shall not occur between January 15 to May 31 to minimize impacts to spawning winter flounder.
25. All dredged material to be reused shall be sampled both on the barge and at the storage sites to be tested for nutrient content prior to its reuse.
26. Pre-work and post-work eelgrass surveys shall be provided to the Commission for review.
27. Any maintenance dredging to be performed from shore shall require the filing of an Amended Order of Conditions request or new Notice of Intent detailing the access points, resource areas impacted and work methods to be reviewed and conditioned by the Commission at that time.

WAIVERS UNDER THE NANTUCKET WETLANDS BYLAW/REGULATIONS

Waivers are not required for this project.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

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Nantucket
City/Town

E. Signatures

This Order is valid for three years, unless otherwise specified as a special condition pursuant to General Conditions #4, from the date of issuance.

03/23/2016

1. Date of Issuance



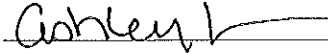
Please indicate the number of members who will sign this form.

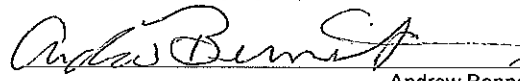

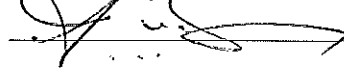

This Order must be signed by a majority of the Conservation Commission.

2. Number of Signers

The Order must be mailed by certified mail (return receipt requested) or hand delivered to the applicant. A copy also must be mailed or hand delivered at the same time to the appropriate Department of Environmental Protection Regional Office, if not filing electronically, and the property owner, if different from applicant.

Signatures:


Ernest Steinauer

Joseph Topham

Ashley Erisman


Andrew Bennett

Ben Champoux

Ian Golding

David LaFleur

☒ by hand delivery on

03/23/2016

Date

☐ by certified mail, return receipt requested, on

Date

F. Appeals

The applicant, the owner, any person aggrieved by this Order, any owner of land abutting the land subject to this Order, or any ten residents of the city or town in which such land is located, are hereby notified of their right to request the appropriate MassDEP Regional Office to issue a Superseding Order of Conditions. The request must be made by certified mail or hand delivery to the Department, with the appropriate filing fee and a completed Request of Departmental Action Fee Transmittal Form, as provided in 310 CMR 10.03(7) within ten business days from the date of issuance of this Order. A copy of the request shall at the same time be sent by certified mail or hand delivery to the Conservation Commission and to the applicant, if he/she is not the appellant.

Any appellants seeking to appeal the Department's Superseding Order associated with this appeal will be required to demonstrate prior participation in the review of this project. Previous participation in the permit proceeding means the submission of written information to the Conservation Commission prior to the close of the public hearing, requesting a Superseding Order, or providing written information to the Department prior to issuance of a Superseding Order.

The request shall state clearly and concisely the objections to the Order which is being appealed and how the Order does not contribute to the protection of the interests identified in the Massachusetts Wetlands Protection Act (M.G.L. c. 131, § 40), and is inconsistent with the wetlands regulations (310 CMR 10.00). To the extent that the Order is based on a municipal ordinance or bylaw, and not on the Massachusetts Wetlands Protection Act or regulations, the Department has no appellate jurisdiction.

Player, Christine

From: Jeff Carlson <JCarlson@nantucket-ma.gov>
Sent: Tuesday, September 25, 2018 1:13 PM
To: Player, Christine
Cc: Charles Gibson; Count, Michael E
Subject: RE: Polpis Harbor Dredging _Order of Conditions SE48-2866

Good afternoon,
I will look into whether this is recorded or not but your interpretation of the conditions is correct.

Thanks,
Jeff Carlson
Natural Resources Coordinator
Town of Nantucket
2 Bathing Beach Road
Nantucket, MA 02554
508-228-7230

From: Player, Christine [mailto:Christine.Player@foth.com]
Sent: Tuesday, September 25, 2018 12:07 PM
To: Jeff Carlson <JCarlson@nantucket-ma.gov>
Cc: Charles Gibson <cgibson@police.nantucket-ma.gov>; Count, Michael E <Michael.Count@foth.com>
Subject: Polpis Harbor Dredging _Order of Conditions SE48-2866

Good Afternoon Jeff-

Thank you so much for your time and guidance with respect to the Order of Conditions (OOCs) issued for the Polpis Harbor maintenance dredging project. As discussed, the Town will be moving ahead with dredging this season, thanks in part to a state grant being available to help cost-share this project. The proposed project will utilize mechanical means (barge mounted crane or excavator) with sediments being placed into a scow that will be towed via tug to Steamship Wharf so they can be unloaded from water to land into trucks and then transported the authorized upland stockpile area(s). Below, please find the 2 special conditions that we have discussed (in *italics*) along with our understanding of the agreed upon resolves for each.

#19. Silt curtains shall be installed to best contain the work area.

Attached is the MADEP 401 Water Quality-Chapter 91 Waterways Combined Dredge permit. Since MADEP is not requiring the use of silt curtains for the proposed project, the Commission will not require that they be installed.

#25. All dredge material to be reused shall be sampled both on the barge and at the storage sites to be tested for nutrient content prior to its' use.

Since it is the Town's intent to stockpile dredge sediment (sand) at the 2 approved upland locations (DPW Yard and Vacant Lot at New South Rd) for future use at a location(s) yet to be determined, testing sediments for nutrients (defined as Phosphorus and Nitrogen) will not be necessary until the time comes for the sediments to be reused. Therefore, no sediment testing is required at this time for the upcoming project.

If you can please send me a quick email confirming that we are on the same page regarding the above special conditions, that would be greatly appreciated. Also, can you please confirm that the Orders have been recorded? I thought Dave Fronzuto took care of this—but just want to be sure we are all set with that.

Thanks again for your help!

Christine

Please note new Email Address and Direct Dial Phone

Christine M. Player
Client Team Leader-Project Manager, Ports & Harbors
Foth-CLE Engineering Group
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Marion, MA 02738
Main Office: (508) 748-0937
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**MA DEP COMBINED 401 WATER QUALITY CERTIFICATION &
CHAPTER 91 WATERWAYS DREDGE PERMIT**

**401WQC Transmittal No. X269790
Chapter 91 Permit No. 14251**

ATTACHMENTS



Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

One Winter Street Boston, MA 02108 • 617-292-5500

Charles D. Baker
Governor

Karyn E. Polito
Lieutenant Governor

Matthew A. Beaton
Secretary

Martin Suuberg
Commissioner

October 4, 2016

David Fronzuto
Town of Nantucket
16 Broad Street
Nantucket, MA 02554

Re: **COMBINED PERMIT - CHAPTER 91 PERMIT and 401 WATER QUALITY
CERTIFICATION**

Application for BRP WW 26
COMBINED PERMIT FOR DREDGING – MAJOR/MINOR PROJECT

At: Polpis Harbor, NANTUCKET

401 WQC Transmittal No: X269790
Chapter 91 Permit No: 14251
Wetlands File No: SE48-699
ACoE Application No:

Dear Mr. Fronzuto:

The Department has reviewed your application for a combined Chapter 91 Dredge Permit and Water Quality Certification ("Combined Permit"), referenced above. In accordance with the provisions of Section 401 of the Federal Clean Water Act as amended (33 U.S.C. §1251 et seq.), MGL c.21, §§ 26-53, 314 CMR 9.00 and MGL c.91, 310 CMR 9.00, the Department has determined there is reasonable assurance the project or activity will be conducted in a manner which will not violate applicable water quality standards (314 CMR 4.00) and other applicable requirements of state law.

The waters of Polpis Harbor are designated in the Massachusetts Surface Water Quality Standards as Class SA. Such waters are intended "as excellent habitat for fish, other aquatic life and wildlife and for primary and secondary contact recreation." Anti-degradation provisions of these Standards require that "existing uses and the level of water quality necessary to protect the existing uses shall be maintained and protected."

Background: Polpis Harbor is located approximately 3 miles northeast of the entrance to Nantucket Harbor. It is an active waterfront utilized by recreational and commercial vessels. Due to its geographic location, Polpis Harbor is also a haven of storm refuge for boaters.

On May 29, 1992, the Department issued a 401 Water Quality Certification, transmittal # 21929, to the Town of Nantucket to dredge the Polpis Harbor entrance channel. On July 2, 1992, Chapter 91 Permit No. 229 was also issued to the Town of Nantucket to dredge the same channel.

Proposed project: The proposed project scope entails conducting maintenance dredging within previously authorized dredge limits, to a design depth of -6.0 feet Mean Low Water (MLW), including a 1-foot allowable overdredge to -7.0 feet MLW and 3H:1V side slopes. The estimated dredge volume is 8,300 yd³.

Dredging will be performed using either hydraulic or mechanical methods. Mechanical methods will consist of a barge-mounted excavator or crane with a closed bucket placing the dredged material into a barge/scow. Hydraulic methods will consist of a suction-cutterhead and the sediment slurry will be pumped directly into a barge/scow to allow for settling and the supernatant effluent will be pumped back into Polpis Harbor. The scow will then be transported with the aid of a tug boat to the Steamship Authority wharf and transferred where the dredged material will be off-loaded onto dump trucks and brought to the DPW yard located at 188 Madaket Road and a vacant lot located off New South Road near the Airport to be stockpiled. Both locations are to be permitted as Intermediate Facility (IF) under 314 CMR 9.07(4).

Eelgrass: An eelgrass survey was conducted in October 2013, adhering to the recommended methodologies presented in the MA Division of Marine Fisheries (DMF) Technical Report TR-43 "*Technical Guidelines for the Delineation, Restoration, and Monitoring of Eelgrass (Zostera marina) in Massachusetts Coastal Waters*". An underwater video camera with a monitor was utilized to visually confirm the presence of eelgrass along each survey transect. The locations shown to contain eelgrass were tagged using GPS so that the limits of existing eelgrass could be determined relative to proposed dredging and nourishment activities.

Based on the eelgrass survey, the proposed dredge plan was developed to entirely avoid direct impacts to the confirmed eelgrass areas within or in close proximity to the limits of the authorized channel (see Special Conditions 17-21)

ALTERNATIVES ANALYSIS: Three alternatives were evaluated for this project:

Alternative 1- No Dredge: Under this alternative, dredging would not be performed within the existing authorized entrance channel, and navigation conditions would continue to deteriorate. Shoaling would continue to increase, reducing tidal flushing and increasing the potential for vessel groundings that may result in spill and/or release of oil and hazardous material (OHM) into the harbor or sediment suspension from prop wash of the vessel. For these reasons, Alternative 1 was eliminated.

Alternative 2 - Maintenance Dredging: Under Alternative 2, maintenance dredging would be performed within all areas within the established limits of the existing navigation channel that are above the authorized depth of -6.0 feet MLW. Implementation of this alternative would restore/improve navigation, public access and use and tidal flushing within the waterway; however, it also would result in a direct impact to approximately ±32,030 SF (±0.7 acres) of existing/confirmed eelgrass habitat that is located within the southern-most reach of the 100-foot wide channel. Alternative 2 is not considered a viable option due the direct impacts to eelgrass habitat that would result from dredging.

Alternative 3 - Modified Maintenance Dredging: Under Alternative 3, maintenance dredging is proposed to restore areas within the existing navigation channel that are above the authorized depth of -6.0 feet MLW, with the exception that no dredging is proposed within the southernmost reach of the existing 100-foot wide channel due to the presence of eelgrass. Instead, channel access will be relocated slightly east to where existing water depths are currently at a minimum -5.0 feet MLW or deeper. Channel markers will be placed by the Town that delineates a 50-foot wide access channel at this location of the harbor. Alternative 3 was the preferred alternative.

Beneficial reuse: The dredged material will be beneficially reused to restore and enhance coastal resiliency along the eroding shorelines of Nantucket.

Proposed Nantucket Sand Bank: While the Town of Nantucket prefers to nourish its public shoreline area(s), these areas are not always available due to the need of nourishment and the need/timing of the dredge does not always arise at the same time. Private eroding beaches may be nourished if easements for public access below the existing high water mark can be secured from the owner of the beach to be nourished. However, the Town has not been successful in obtaining all the easements for public access in the past two years. As a result, the Town decided to establish a Sand Bank in order to proceed with the dredging of the Polpis Harbor channel and to allow the dredged material to be available for beneficial reuse at both publicly and privately owned eroding beaches.

The Sand Bank will provide the Town of Nantucket more flexibility in managing and reusing dredged material for nourishment. The Town is currently in the initial planning phase required to implement a comprehensive dredge program and has secured the necessary funding to proceed with the related design and permitting efforts. A preliminary island-wide matrix has been developed by the Town identifying potential dredge and beach nourishment sites (see Attachment 1).

The Town has conducted a precursory assessment of potential private parties interested in purchasing dredged sediments and confirmed that there is a significant demand for sand. The Town also confirmed that there is a shortage of available material from upland sources and the price per cubic yard of sand ranged from \$40 to \$52. Multiple parties expressed interest in purchase the dredged sand from Polpis Harbor due to an immediate need of material and potential cost savings for not purchasing from upland sources. The interested parties understand that a valid Order of Conditions from the Conservation Commission would be required and beach public access easement in-hand.

Based on the response of the private entities, it is anticipated that 80 percent of the dredged sediment from Polpis will be purchased by the interested private entities. Prior to commencement of the maintenance dredging of Polpis Harbor, the Town of Nantucket will finalize the purchase agreement with all the interested private parties. The purchase agreement will include:

1. proof of existing **valid** permit authorization for beach nourishment at the property of interest;

2. copy of all applicable public beach access easements that have been secured for the public use of the private land being nourished with dredged material from the publicly funded dredging project, and
3. payment for the quantity of beach sand to be purchased and picked up for further distribution.

No dredged sediment will be sold by the Town to any private entity that does not have the required public access easement(s) in-hand. The Town will administer and monitor the purchase protocol to ensure proper authorization(s) and documentation(s) are in place for the dredged material to be distributed amongst the approved private entities.

Once the dredged sand is transported from the barge to Steamship Wharf where it will be unloaded onto trucks and distributed to the private properties with the final purchased agreement. Any of the dredged sand that is not purchased by private entities will be trucked and placed at the designated Intermittent Facilities for stockpile. The stockpiled material will be available for reuse on as-needed basis and will provide an established/authorized reuse location.

The proceeds generated under the Sand Bank will be allocated to the Town's General Fund for future dredging and nourishment project. Dredging and nourishment projects funded by this source of revenue are considered as public funded projects. Private entities interested in purchasing the sand will have to abide by the above conditions (Michael Counts, personal communication-electronic mail dated September 22, 2016).

Sediment sampling data: Nine core samples were collected within the proposed dredge footprint for gradation analysis. Results of the gradation analysis showed all nine sediment samples contained less than ten percent of particles (0.5 percent to 3 percent) passing the No. 200 U.S. Standard Series Testing Sieve.

In accordance with 314 CMR 9.07(2)(a), no chemical testing is required if the sediment to be dredged contains less than ten percent of particles passing the No. 200 U.S. Standard Series Testing Sieve, and if the required "due diligence review" demonstrates to the Department's satisfaction that the area is unlikely to contain anthropogenic concentrations of oil or hazardous materials. As such, Special Condition no. 9 requires a due diligence review be conducted and its findings be submitted to the Department.

Dredged Material Dewatering: Based on the results of the gradation analysis, very little or no dewatering will be required for the dredged material. In this case, the dredged material will settle rapidly in the barge/scow and the supernatant effluent will return back to the Nantucket/Polpis Harbor.

Rare Species and Rare Wildlife Habitat: The site is located within the Priority Habitats of Rare Species, Estimated Habitats of Rare Wildlife, and Certified Vernal Pools in accordance with the Massachusetts Natural Heritage Atlas, 13th Edition. According to a letter dated March 18, 2015, from the Division of Fisheries & Wildlife, Natural Heritage & Endangered Species Program (NHESP), it has determined that this project as proposed must be conditioned in order to avoid adverse effect the actual Resource Area Habitat of state-protected rare wildlife species and a prohibited "take" (see Special Condition 16).

Public Notice: The public notice of the Chapter 91 dredge and 401 WQC combined application was published in the Nantucket Inquirer and Mirror on May 19, 2016. The Department did not receive any comment during the 21-day public comment period under 314 CMR 9.05(3)(e) and the 15-day public comment period under 310 CMR 9.13(1)(c)5, which ended on June 9, 2016 and June 3, 2016 respectively.

Section 61 Findings: Pursuant to M.G.L. Chapter 30, Sections 61 to 62H (M.E.P.A.) this project was reviewed as EOE No. 15241 and the Secretary's Certificate, issued on September 5, 2014 found that t an Environmental Impact Report (EIR) was not required.

Therefore, based on information currently in the record, the Department grants a Combined Permit for this project subject to the following conditions to maintain water quality, to minimize impact on waters and wetlands, and to ensure compliance with appropriate state law. The Department further certifies in accordance with 314 CMR 9.00 that there is reasonable assurance the project or activity will be conducted in a manner which will not violate applicable water quality standards (314 CMR 4.00) and other applicable requirements of state law. Finally, the Department has determined that upon satisfying the conditions and mitigation requirements of this approval, the project provides a level of water quality necessary to protect existing uses and accordingly finds that the project to be implemented satisfies the Surface Water Quality Standards at 314 CMR 4.00

STANDARD COMBINED PERMIT CONDITIONS:

1. Acceptance of this Combined Permit shall constitute an agreement by the Applicant to conform to all terms and conditions stated herein.
2. This Combined Permit is issued upon the express condition that any and all other applicable authorizations necessitated due to the provisions hereof shall be secured by the Applicant prior to the commencement of any activity hereby authorized.
3. This Combined Permit shall be revocable by the Department for noncompliance with the terms and conditions set forth herein. This Combined Permit may be revoked after the Department has given written notice of the alleged noncompliance to the Applicant, or his agent, and those persons who have filed a written request, with the Department, for such notice and have afforded the Applicant a reasonable opportunity to correct said noncompliance.
4. This Combined Permit is issued subject to all applicable federal, state, county, and municipal laws, ordinances, by-laws, and regulations, including but not limited to, a valid Order of Conditions issued pursuant to the Wetlands Protection Act, M.G.L. Chapter 131, s.40.
5. This Combined Permit is issued upon the express condition that dredging and transportation and disposal of dredge material shall be in strict conformance with all applicable requirements and authorizations of the Department.
6. The Applicant shall assume and pay all claims and demands arising in any manner from the work authorized herein, and shall save harmless and indemnify the Commonwealth of

Massachusetts, its officers, employees, and agents from all claims, audits, damages, costs and expenses incurred by reason thereof.

7. Dredging under this Combined Permit shall be conducted in a manner not to cause unnecessary obstruction of the free passage of vessels. When conducting authorized dredging, care shall be taken not to cause any shoaling. If, however, any shoaling is caused, the Applicant shall, at his expense remove the shoal areas. The Applicant shall pay all costs of supervision, and if at any time the Department deems necessary a survey or surveys of the area dredged, the Applicant shall pay all costs associated with such work. Nothing in this Combined Permit shall be construed as to impair the legal rights of any persons, or authorize dredging on land not owned by the Applicant without consent of the owner(s) of such property.

SPECIAL COMBINED PERMIT CONDITIONS

1. The Contractor shall take all steps necessary to assure that the proposed activities will be conducted in a manner that will avoid violations of the anti-degradation provisions of the Massachusetts Surface Water Quality Standards that protect all waters, including wetlands.
2. Prior to the start of work, or any other portion of the work thereafter, the Department shall be notified of any change(s) in the proposed project or plans that may affect waters or wetlands. The Department will determine whether the change(s) require a revision to this Combined Permit.
3. Dredging in accordance with this Combined Permit may begin following the 21-day appeal period and once all other Permits have been received.
4. Work in waters and wetlands shall conform to Part E – Proposed Scope of Project and Use Activity Description and plans/figures submitted in this application to the Department, 11 sheets prepared by CLE Engineering, Inc., dated April 1, 2016, and are unsigned and unstamped. The Department shall be notified if there are modifications and or deletions of work as specified in the plans. Depending on the nature and the scope of any change, approval by the Department may be required.
5. The applicant and its contractor shall allow agents of the Department to enter the project sites to verify compliance with the conditions of this Combined Permit.
6. The Department shall be notified, attention Ken Chin 617-292-5893, one week prior to the start of in-water work so that Department staff may inspect the work for compliance with the terms and conditions of this Combined Permit.
7. The term of the Chapter 91 dredge permit of this Combined Permit is five years in accordance with 310 CMR 9.15(2). The term of the 401 WQC dredging of the Combined Permit remains in effect for the same duration as the federal permit that requires it or five years from the date of issuance of this Combined Permit whichever comes first.

8. The applicant may request an extension of the 401 dredging of the Combined Permit in accordance with 314 CMR 9.09(3). If the Department grants an extension, the Chapter 91 dredge permit of the Combined Permit will also be extended for the same term.
9. Within 21 days of issuance of the Combined Permit, the applicant shall perform a due-diligence review in accordance with 314 CMR 9.07(2)(a) to determine that no known spills of oil or other toxic substances have occurred which could have contaminated the sediment in the proposed dredge area(s). The findings of the due-diligence review shall be submitted to the Department prior to commencement of the dredging activity.
10. Future maintenance dredging may be conducted as necessary for the duration of this Combined Permit, provided that:
 - a. the initial project and any subsequent dredging has been conducted satisfactorily with no violations of the terms and conditions of this Combined Permit or any violations which did occur have been resolved to the satisfaction of the Department;
 - b. Confirm that the private entity has a valid permit for the beach nourishment activity;
 - c. information has been submitted to the Department, if applicable, regarding chemical characteristics and final end use/disposal of the dredged material for review and approval and no future maintenance dredging has commenced without obtaining end use/disposal approval from the Department;
 - d. **Documentation** showing the grain-size distribution of the sediment to be dredged is compatible with the grain-size distribution of the approved receiving beach(es) in accordance with the document entitled Beach Nourishment, Mass DEP's Guide to Best Management Practices for Projects in Massachusetts, March 2007 and is submitted to the Department;
 - e. coordinates of the maintenance dredge footprint are the same as the dredge footprint authorized under this Certification;
 - f. a current due-diligence evaluation is done to determine that no known spills of oil or other toxic substances have occurred which could have contaminated the sediment in the dredge area and submitted to the Department prior to maintenance dredging;
 - g. a bathymetric survey has been submitted to the Department in compliance with Condition no. 21;
 - h. the volume of future maintenance dredging does not exceed 8,300 cubic yards and the Department is notified prior to commencement of maintenance dredging.
11. The Town shall maintain all final purchase agreements. At a minimum, the purchase agreement shall include the following information:
 - a. name of the private entity;
 - b. address of the nourishment location;
 - c. copy of the valid permit for nourishment;
 - d. public beach access agreement;
 - e. quantity of sand purchased and price per cubic yard.

Copy of the purchase agreement shall be provided to the Department upon request.

12. When conducting future maintenance dredging at Station 3+00 and 17+00 of the entrance channel adjacent to Quaise Point, equipment such as a long reach excavator shall be situated above the Mean High Tide (MHT) line. Any temporary impact to the coastal beach

shall be restored back to the pre-dredging condition. In the event that dredging cannot be carried out above the MHT line or cause additional impact to other wetland resources, the applicant or its contractor shall submit a proposed work plan to the Wetlands and Waterways Program, Attn: Ken Chin for review and approval. Dredging may not commence without obtaining the approval from the Department.

13. Best Management Practices (BMPs) such as a silt curtain shall be deployed surrounding the dredge area to minimize turbidity. At a minimum, the silt curtain shall be bottom-weighted to minimize the degree of lifting/flailing or billowing and shall be of suitable material/grade appropriate based on the velocity of the current at the site. Intermediate vertical floats or other means shall be placed on the silt curtain to lift the bottom of the silt curtain at low tide so that the bottom edges of the curtain remain close to the mudline at low tide but do not rake the sediment in areas subject to tidal influence. Dredging shall be carried out using a closed, environmental bucket if the sediment does not consist solely of densely compacted silt/clay.
14. Best Management Practices (BMPs) shall be implemented during transportation of the dredged material to the licensed receiving facility. At a minimum, when transported upon public roadways, all dredged material shall have no free liquid as determined by the Paint Filter Test or other suitably analogous methodology acceptable to the Department, and a tarpaulin or other means shall be used to cover the dredged material during transport.
15. Disposal of any volume of dredged material at any location in tidal waters is subject to approval by this Department and the Massachusetts Coastal Zone Management office.
16. The applicant shall comply with the conditions set forth in the March 15, 2015 letter issued by the Natural Heritage Endangered Species Program of the Division of Fisheries & Wildlife.
17. If it is feasible, a buffer of 100 feet shall be maintained between the top of slope of the channel and any identified bordering eelgrass beds.
18. In area where the buffer is less than 100 feet, a pre-and post-dredge eelgrass survey shall be conducted. The eelgrass survey protocol shall be submitted electronically to the Wetlands and Waterway Division in the Boston Office, attn.: Ken Chin, and to the Division of Marine Fisheries (DMF) (DMF.EnvReview-South@state.ma.us) for review and approval prior to commencement of the dredging activity of Polpis Harbor.
19. The approved pre-dredge eelgrass survey should be performed during the eelgrass growing season in May or September. Of these two potential survey months, whichever most closely precedes the planned dredge activity shall be selected. The approved post-dredge surveys should be performed in the same growing season selected in the pre-dredge survey. Survey results shall be submitted to the Department and DMF for review. Any eelgrass loss documented through the survey will require mitigation according to a mitigation plan developed in coordination with DEP and DMF.
20. Prior to construction, all contractors will be made aware of eelgrass in the project vicinity and be instructed to avoid eelgrass at all times during construction activities. Any eelgrass beds within 500 feet of the construction footprint should be marked with buoys prior to construction to facilitate avoidance.

21. Within 90 days of the completion of the initial dredging and any future maintenance dredging to be conducted authorized under this Combined Permit, a bathymetric survey of the dredged area within [name of the waterbody] depicting post-dredge conditions shall be conducted. At a minimum, the survey shall include an overlay of the dredge footprint (i.e. top of slope) with sufficient coordinates in the Massachusetts State Plane (e.g. longitude and latitude) to clearly delineate the dredge footprint. The survey shall be submitted within five working days after its completion to the Department and a copy shall be sent to the Massachusetts Coastal Zone Management office, attention: Robert Boeri. This submittal shall also include a cross section or profile showing the water depths at mean low water within the dredge footprint.
22. In order to protect spawning, larval and juvenile development of winter flounder, no dredging shall occur between January 15th and May 31st.

The applicant, or its contractor, shall make every feasible effort to complete the project within the Combined Permitted timeframe. Should the applicant, or their contractor, fail to complete the project and wish to request an amendment to the Combined Permit for incursion into the no-dredge period, the written request shall be received by the Department by January 2nd. The following information shall be included in the request:

- a. project location and transmittal number,
- b. the date on which dredging started,
- c. the number of days and hours per day the dredge operated,
- d. expected daily average production rate and the actual daily average production rate,
- e. an explanation of why the project failed to remain on schedule,
- f. an account of efforts made to get the project back on schedule,
- g. a plan depicting the areas that remain to be dredged,
- h. the number of cubic yards that remain to be dredged,
- i. an accurate estimate of the number of days required to complete the project,
- j. an evaluation of the impact of continued dredging on the species of concern,
- k. a description of any efforts that will be made to minimize the impacts of the project on the species of concern, and a realistic assessment of any societal/financial effects of a denial of permission to continue dredging.

The Department will share the information with other resource agencies and a decision to grant or deny the amendment shall be made by January 15th. Requests for amendment received after January 2nd will be considered at the Department's discretion.

23. No later than four weeks after issuance of the Combined Permit, the applicant shall submit a notification procedure outlining the reporting process to the Department for incidents, relating to the dredging activities, impacting surrounding resource areas and habitats such as, but not limited to, observed dead or distressed fish, or other aquatic organisms, observed oily sheen on surface water, sediment spill, turbidity plume beyond the deployed BMP's, and barging or equipment accident/spill. If at any time during implementation of the project any incident environment impacts such as those listed above, all site related activities impacting the water shall cease until the source of the problem is identified and adequate mitigating measures employed to the satisfaction of the Department.

Failure to comply with this Combined Permit is grounds for enforcement, including civil and criminal penalties, under MGL c.21 §42, 314 CMR 9.00, MGL c. 21A §16, 310 CMR 5.00, MGL c.91, 310 CMR 9.00 or other possible actions/penalties as authorized by the General Laws of the Commonwealth.

This Combined Permit does not relieve the applicant of the obligation to comply with other applicable state or federal statutes or regulations. Any changes made to the project as described in the previously submitted Notice of Intent, Combined Permit application, or supplemental documents will require further notification to the Department.

NOTICE OF APPEAL RIGHTS

Chapter 91 Appeal Process (310 CMR 9.17)

Pursuant to 310 CMR 9.17(1)(a) and 9.17(2), the applicant may appeal this decision within twenty-one (21) days of the date of Combined Permit issuance, by submitting a written request, by certified mail, for an adjudicatory hearing. Any notice of claim for an adjudicatory hearing must include the following information: the DEP Combined Application license/permit Number; the complete name, address and telephone number of the party filing the request; if represented by counsel, the name, address and telephone number of the attorney; a clear statement that a formal adjudicatory hearing is being requested; and a clear and concise statement of the specific objections to the Department's license decision, and the relief sought through the adjudicatory hearing, including, specifically, the changes desired in the final Combined Permit.

The following persons shall have the right to an adjudicatory hearing concerning this decision by MassDEP to grant or deny a license or Combined Permit, in accordance with 310 CMR 9.17(1):

- a. an applicant who has demonstrated property rights in the lands in question, or which is a public agency;
- b. any person aggrieved by the decision of MassDEP to grant a Combined Permit who has submitted written comments within the public comment period;
- c. ten (10) residents of the Commonwealth who, pursuant to M.G.L. c. 30A, § 10A, have submitted comments within the public comment period with at least 5 of the 10 residents residing in the municipality(s) in which the Combined Permit activity is located. The appeal shall clearly and specifically state the facts and grounds for the appeal and the relief sought, and each appealing resident shall file an affidavit stating the intent to be part of the group and to be represented by its authorized representative;
- d. the municipal official in the affected municipality who has submitted written comments within the public comment period; and
- e. CZM, for any project identified in 310 CMR 9.13(2) (a) for CZM participation or, in an Ocean Sanctuary, if it has filed a notice of participation within the public comment period.

A person requesting an adjudicatory hearing must submit a "Notice of Claim" to the Department, with a copy of the MassDEP Transmittal Form and including the detail specified below, within twenty-one (21) days of the date of issuance of this decision. The MassDEP Fee Transmittal Form is available at the following website:

<http://www.mass.gov/eea/docs/dep/service/adr/adjherfm.doc>. The Notice of Claim must be made in writing and sent by certified mail or hand delivery to:

Case Administrator
MassDEP
One Winter Street, 2nd Floor
Boston, MA 02108

A copy of the complete Notice of Claim must be sent at the same time by certified mail or hand delivery to: (1) the applicant, (2) the municipal official of the city or town where the project is located, and (3) the issuing office of the MassDEP, which in this case is located at:

MassDEP Waterways Regulation Program
[appropriate Regional Office address]

The MassDEP Fee Transmittal Form and a valid check payable to the Commonwealth of Massachusetts in the amount of one hundred dollars (\$100) must be mailed to:

Mass. Department of Environmental Protection
Commonwealth Master Lockbox
P.O. Box 4062
Boston, Massachusetts 02211

Information must be included in the hearing request

Pursuant to 310 CMR 9.17(3), any Notice of Claim requesting an adjudicatory hearing must include the following information:

- a. the 401 Combined Permit Transmittal Number and MassDEP Waterways Application File Number;
- b. the complete name, address, fax number and telephone number of the applicant;
- c. the address of the project;
- d. the complete name, address, fax number, and telephone number of the party filing the request and, if represented by counsel, the name, address, fax number, and phone number of the attorney;
- e. if claiming to be a person aggrieved, the specific facts that demonstrate that the party satisfies the definition of "aggrieved person" found in 310 CMR 9.02;
- f. a clear statement that a formal adjudicatory hearing is being requested;
- g. a clear statement of the facts which are the grounds for the proceedings, the specific objections to the MassDEP's written decision, and the relief sought through the adjudicatory hearing, including specifically the changes desired in the final written decision; and
- h. a statement that a copy of the request has been sent to: the applicant and the municipal official of the city or town where the project is located.

Dismissal of request

The request for appeal will be dismissed if the filing fee is not paid, unless the appellant is exempt or is granted a waiver. The filing fee is not required if the appellant is a city or town (or municipal agency), county, or district of the Commonwealth of Massachusetts, or a municipal

housing authority. The Department may waive the adjudicatory hearing filing fee pursuant to 310 CMR 4.06(2) for a person who shows that paying the fee will create an undue financial hardship. A person seeking a waiver must file an affidavit setting forth the facts believed to support the claim of undue financial hardship together with the hearing request as provided above.

Please note that the Department may revoke this Combined Permit for non-compliance with the terms and conditions set forth. Therefore, it is recommended that you contact the Department prior to performing any alterations or use modifications for review and, if necessary, approval pursuant to M.G.L. Chapter 91.

401 WQC Appeal Process (314 CMR 9.10):

Certain persons shall have a right to request an adjudicatory hearing concerning Combined Permits by the Department when an application is required:

- a. the applicant or property owner;
- b. any person aggrieved by the decision who has submitted written comments during the public comment period;
- c. any ten (10) persons of the Commonwealth pursuant to M.G.L. c.30A where a group member has submitted written comments during the public comment period; or
- d. any governmental body or private organization with a mandate to protect the environment, which has submitted written comments during the public comment period.

Any person aggrieved, any ten (10) persons of the Commonwealth, or a governmental body or private organization with a mandate to protect the environment may appeal without having submitted written comments during the public comment period only when the claim is based on new substantive issues arising from material changes to the scope or impact of the activity and not apparent at the time of public notice. To request an adjudicatory hearing pursuant to M.G.L. c.30A, § 10, a Notice of Claim must be made in writing, provided that the request is made by certified mail or hand delivery to the Department, with the appropriate filing fee specified within 310 CMR 4.10 along with a DEP Fee Transmittal Form within twenty-one (21) days from the date of issuance of this Certificate.

Case Administrator
Department of Environmental Protection
One Winter Street, 2nd Floor
Boston, MA 02108.

A copy of the request shall at the same time be sent by certified mail or hand delivery to the issuing office of the Wetlands and Waterways Program at:

Department of Environmental Protection
One Winter Street, 5th Floor
Boston, MA 02108.

A Notice of Claim for Adjudicatory Hearing shall comply with the Department's Rules for Adjudicatory Proceedings, 310 CMR 1.01(6), and shall contain the following information pursuant to 314 CMR 9.10(3):

- a. the 401 Combined Permit Transmittal Number and DEP Wetlands Protection Act File Number;
- b. the complete name of the applicant and address of the project;
- c. the complete name, address, and fax and telephone numbers of the party filing the request, and, if represented by counsel or other representative, the name, fax and telephone numbers, and address of the attorney;
- d. if claiming to be a party aggrieved, the specific facts that demonstrate that the party satisfies the definition of "aggrieved person" found at 314 CMR 9.02;
- e. a clear and concise statement that an adjudicatory hearing is being requested;
- f. a clear and concise statement of (1) the facts which are grounds for the proceedings, (2) the objections to this Certificate, including specifically the manner in which it is alleged to be inconsistent with the Department's Water Quality Regulations, 314 CMR 9.00, and (3) the relief sought through the adjudicatory hearing, including specifically the changes desired in the final written Combined Permit; and
- g. a statement that a copy of the request has been sent by certified mail or hand delivery to the applicant, the owner (if different from the applicant), the conservation commission of the city or town where the activity will occur, the Department of Environmental Management (when the certificate concerns projects in Areas of Critical Environmental Concern), the public or private water supplier where the project is located (when the certificate concerns projects in Outstanding Resource Waters), and any other entity with responsibility for the resource where the project is located.

The hearing request along with a DEP Fee Transmittal Form and a valid check or money order payable to the Commonwealth of Massachusetts in the amount of one hundred dollars (\$100) must be mailed to:

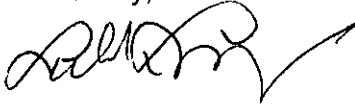
Commonwealth of Massachusetts
Department of Environmental Protection
Commonwealth Master Lockbox
P.O. Box 4062
Boston, MA 02211

The request will be dismissed if the filing fee is not paid, unless the appellant is exempt or granted a waiver. The filing fee is not required if the appellant is a city or town (or municipal agency), county, or district of the Commonwealth of Massachusetts, or a municipal housing authority. The Department may waive the adjudicatory-hearing filing fee pursuant to 310 CMR 4.06(2) for a person who shows that paying the fee will create an undue financial hardship. A person seeking a waiver must file an affidavit setting forth the facts believed to support the claim of undue financial hardship together with the hearing request as provided above.

Failure to comply with this Combined Permit is grounds for enforcement, including civil and criminal penalties, under MGL c.21 §42, 314 CMR 9.00, MGL c. 21A §16, 310 CMR 5.00, or other possible actions/penalties as authorized by the General Laws of the Commonwealth.

If you have questions about this decision, please contact Ken Chin at 617-292-5893.

Sincerely,



Lealdon Langley
Director
Wetlands and Waterways Program

enclosure: Departmental Action Fee Transmittal Form

ecc:

Barbara Newman, Regulatory/Enforcement Division, U.S. Army Corps of Engineers, 696 Virginia Road,
Concord, MA 01742-2751
Robert Boeri, CZM, 251 Causeway Street, Suite 800, Boston, MA 02114
John Logan, DMF, 1213 Purchase St., 3rd floor, New Bedford, MA 02740-6694
Carlos Fragata, Jim Mahala, DEP SERO
Michael Counts, CLE Engineering, Inc. 15 Creek Road, Marion, MA 02738 Consultant
Sheila Lucey, Harbor Master, 34 Washington Street, Nantucket, Ma 02554

cc: Nantucket Conservation Commission, 2 Bathing Beach Road, Nantucket, MA 02554

KC/X269790

Attachment 1

Harbor	Location	Frequency	Volume (cuyd)	Estimated Cost (\$)	Project Description	Year
Madaket Harbor	Hither Creek	1-3 YRS	10,000	\$350,000	Public Beach Nourishment ** S/B	1989
Madaket Harbor	Madaket Channel	1-3 YRS	35,000	\$700,000	Public Beach Nourishment **S/B	1989
Nantucket Harbor	Nantucket Harbor and Federal Channel	Immediate need *Scheduled 10/15	40,000	0 Federally Maintained	To be determine	2015
Nantucket Harbor	Nantucket Town Pier	Immediate need	10,000	\$250,000	Not identified **S/B	
Nantucket Harbor	Children's Beach	1-3 YRS	2,000	\$75,000	** S/B	2006
Nantucket Harbor	Easy Street Mooring Field	3-5 YRS	25,000	\$500,000	Public Beach Nourishment ** S/B	
Polpis Harbor	Main Channel (area near entrance)	Immediate need *Scheduled 10/16	9,000	\$250,000	Public Beach Nourishment **S/B	1993
Nantucket Harbor	Head of Harbor	5-7 YRS	40,000	1,000,000	Public Beach Nourishment **S/B	1996
**/B Sand Bank						



Massachusetts Department of Environmental Protection
One Winter Street, Boston MA 02108 • Phone: 617-292-5751

Communication For Non-English Speaking Parties .

310 CMR 1.03(5)(a)



1 English:

This document is important and should be translated immediately. If you need this document translated, please contact MassDEP's Diversity Director at the telephone numbers listed below.



2 Español (Spanish):

Este documento es importante y debe ser traducido inmediatamente. Si necesita este documento traducido, por favor póngase en contacto con el Director de Diversidad MassDEP a los números de teléfono que aparecen más abajo.



3 Português (Portuguese):

Este documento é importante e deve ser traduzida imediatamente. Se você precisa deste documento traduzido, por favor, entre em contato com Diretor de Diversidade da MassDEP para os números de telefone listados abaixo.



4(a) 中國（傳統）(Chinese (Traditional)):

本文件非常重要，應立即翻譯。如果您需要翻譯這份文件，請用下面列出的電話號碼與MassDEP的多樣性總監聯繫。



4(b) 中国（简体中文）(Chinese (Simplified)):

本文件非常重要，应立即翻译。如果您需要翻译这份文件，请用下面列出的电话号码与MassDEP的多样性总监联系。



5 Ayisyen (franse kreyòl) (Haitian) (French Creole):

Dokiman sa-a se yon bagay enpòtan epi yo ta dwe tradui imedyatman. Si ou bezwen dokiman sa a tradui, tanpri kontakte Divèsite Direktè MassDEP a nan nimewo telefòn ki nan lis pi ba a.



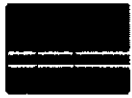
6 Việt (Vietnamese):

Tài liệu này là rất quan trọng và cần được dịch ngay lập tức. Nếu bạn cần dịch tài liệu này, xin vui lòng liên hệ với Giám đốc MassDEP đa dạng tại các số điện thoại được liệt kê dưới đây.



7 ប្រទេសកម្ពុជា (Kmer (Cambodian)):

ឯកសារនេះគឺមានសារៈសំខាន់និងគួរត្រូវបានបកប្រែភ្លាមៗ ប្រសិនបើអ្នកត្រូវបានបកប្រែឯកសារនេះសូមទំនាក់ទំនងភ្នាក់ងារជាតិ MassDEP នៅលេខទូរស័ព្ទដែលបានរាយនាមខាងក្រោម។



8 Kriolu Kabuverdianu (Cape Verdean):

Es documento é importante e deve ser traduzido imidiatamente. Se bo precisa des documento traduzido, por favor contacta Director de Diversidade na MassDEP's pa es numero indicode li d'boche.



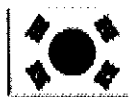
9 Русский язык (Russian):

Этот документ является важным и должно быть переведено сразу. Если вам нужен этот документ переведенный, пожалуйста, свяжитесь с директором разнообразия MassDEP по адресу телефонных номеров, указанных ниже.



10 العربية (Arabic):

هذه الوثيقة الهامة وينبغي أن تترجم على الفور. إذا كنت بحاجة الى هذه الوثيقة المترجمة، يرجى الاتصال مدير التنوع في MassDEP على أرقام الهواتف المدرجة أدناه.



11 한국어 (Korean):

이 문서는 중요하고 즉시 번역해야 합니다. 당신이 번역이 문서가 필요하다면 아래의 전화 번호로 MassDEP의 다양성 감독에 문의하시기 바랍니다



12 հայերեն (Armenian):

Այս փաստաթուղթը շատ կարևոր է եւ պէտք է թարգմանել անմիջապէս. Եթէ Ձեզ անհրաժեշտ է այս փաստաթուղթը թարգմանվել դիմել MassDEP բազմազանությունը տնօրեն է հեռախոսահամարների թվարկված են ստորեւ.



13 فارسی (Farsi (Persian):

این سند مهم است و باید فوراً ترجمه شده است.
اگر شما نیاز به این سند ترجمه شده، لطفاً با ما تماس تنوع مدیر MassDEP در شماره تلفن های ذکر شده در زیر.



14 Français (French):

Ce document est important et devrait être traduit immédiatement. Si vous avez besoin de ce document traduit, s'il vous plaît communiquer avec le directeur de la diversité MassDEP aux numéros de téléphone indiqués ci-dessous.



15 Deutsch (German):

Dieses Dokument ist wichtig und sollte sofort übersetzt werden. Wenn Sie dieses Dokument übersetzt benötigen, wenden Sie sich bitte Diversity Director MassDEP die in den unten aufgeführten Telefonnummern.



16 Ελληνική (Greek):

Το έγγραφο αυτό είναι σημαντικό και θα πρέπει να μεταφραστούν αμέσως. Αν χρειάζεστε αυτό το έγγραφο μεταφράζεται, παρακαλούμε επικοινωνήστε Diversity Director MassDEP κατά τους αριθμούς τηλεφώνου

που αναγράφεται πιο κάτω.



17 Italiano (Italian):

Questo documento è importante e dovrebbe essere tradotto immediatamente. Se avete bisogno di questo documento tradotto, si prega di contattare la diversità Direttore di MassDEP ai numeri di telefono elencati di seguito.



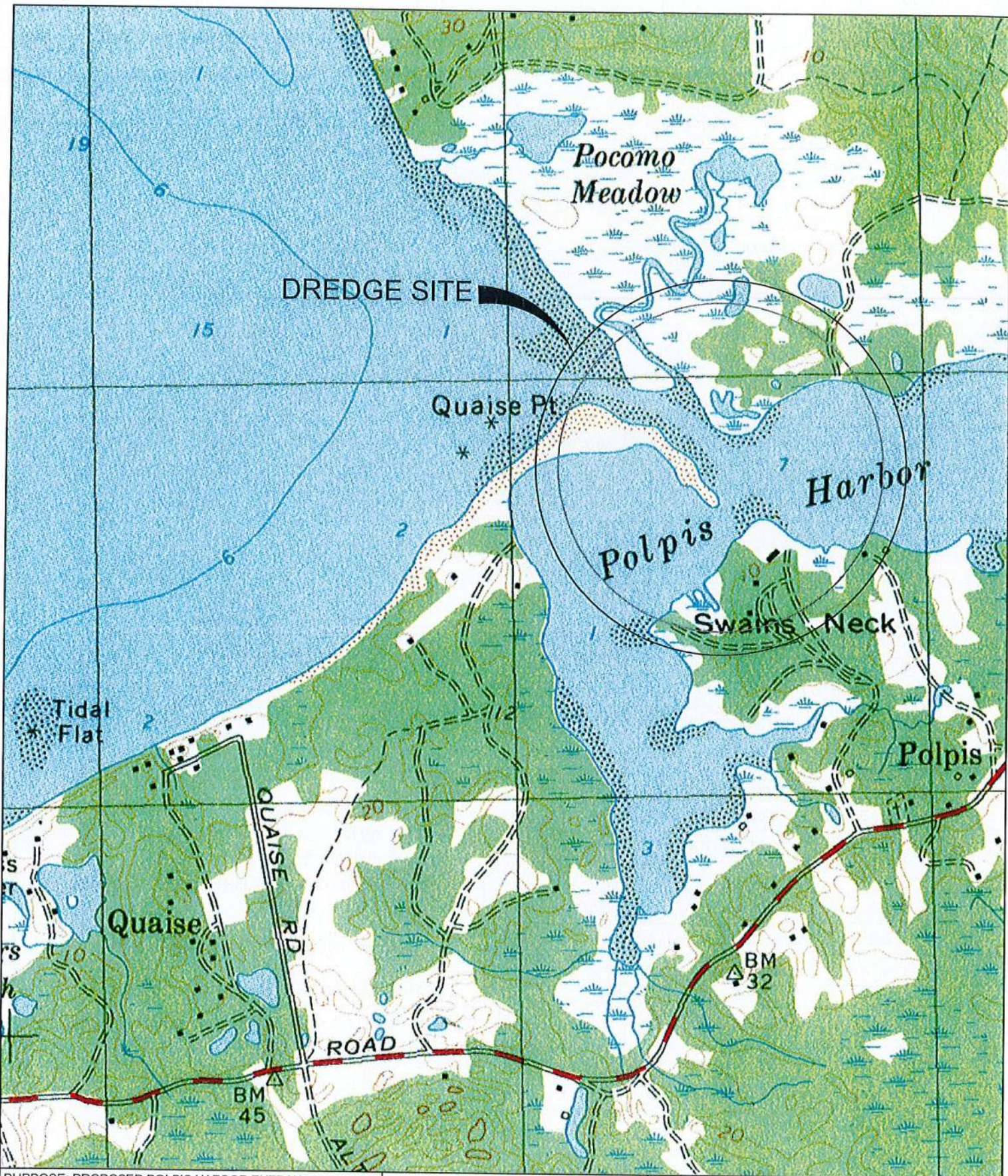
18 Język Polski (Polish):

Dokument ten jest ważny i powinien być natychmiast przetłumaczone. Jeśli potrzebujesz tego dokumentu tłumaczone, prosimy o kontakt z Dyrektorem MassDEP w różnorodności na numery telefonów wymienionych poniżej.



19 हिन्दी (Hindi):

यह दस्तावेज महत्वपूर्ण है और तुरंत अनुवाद किया जाना चाहिए. आप अनुवाद इस दस्तावेज की जरूरत है, नीचे सूचीबद्ध फोन नंबरों पर MassDEP की विविधता निदेशक से संपर्क करें.



PURPOSE: PROPOSED POLPIS HARBOR ENTRANCE
CHANNEL MAINTENANCE DREDGING TO IMPROVE
NAVIGATION AND TIDAL FLUSHING

DATUM: **PERMIT NO. 14251**
MLW = 0.0
MHW = +3.0
AHTL = +4.1
Approved by Department of Environmental Protection
Date: October 4, 2016

CLE ENGINEERING, INC.
15 CREEK ROAD, MARION MA, 02738

LOCUS MAP

GRAPHIC SCALE

0 500 1000

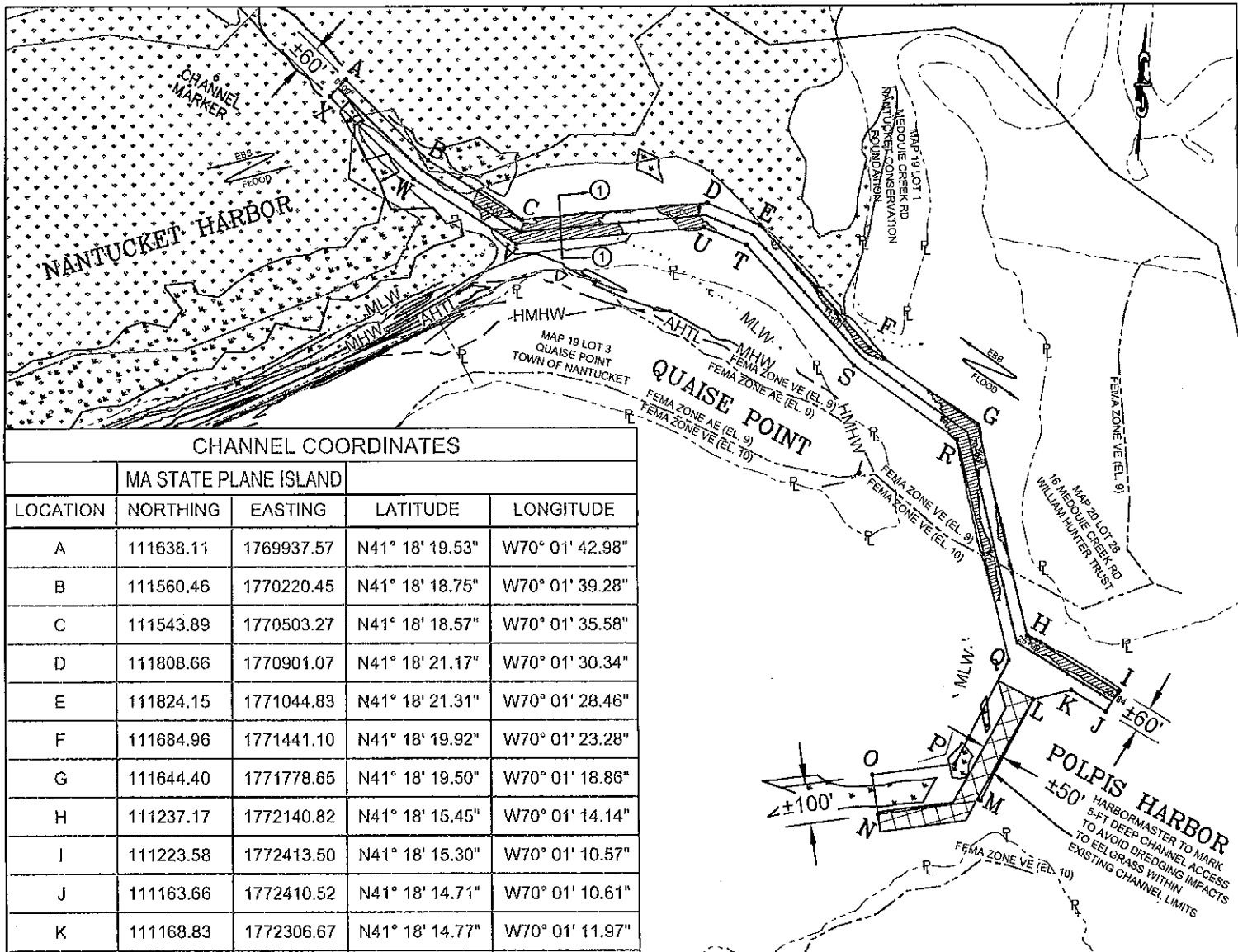
SCALE IN FEET

POLPIS HARBOR ENTRANCE CHANNEL MAINTENANCE
DREDGING PROJECT
NANTUCKET, MASSACHUSETTS

AT: POLPIS HARBOR/NANTUCKET HARBOR
COUNTY OF: NANTUCKET
APPLICATION BY: TOWN OF NANTUCKET

DATE: APRIL 1, 2016

SHEET 1 OF 11



CHANNEL COORDINATES				
MA STATE PLANE ISLAND				
LOCATION	NORTHING	EASTING	LATITUDE	LONGITUDE
A	111638.11	1769937.57	N41° 18' 19.53"	W70° 01' 42.98"
B	111560.46	1770220.45	N41° 18' 18.75"	W70° 01' 39.28"
C	111543.89	1770503.27	N41° 18' 18.57"	W70° 01' 35.58"
D	111808.66	1770901.07	N41° 18' 21.17"	W70° 01' 30.34"
E	111824.15	1771044.83	N41° 18' 21.31"	W70° 01' 28.46"
F	111684.96	1771441.10	N41° 18' 19.92"	W70° 01' 23.28"
G	111644.40	1771778.65	N41° 18' 19.50"	W70° 01' 18.86"
H	111237.17	1772140.82	N41° 18' 15.45"	W70° 01' 14.14"
I	111223.58	1772413.50	N41° 18' 15.30"	W70° 01' 10.57"
J	111163.66	1772410.52	N41° 18' 14.71"	W70° 01' 10.61"
K	111168.83	1772306.67	N41° 18' 14.77"	W70° 01' 11.97"
L	111101.72	1772232.05	N41° 18' 14.11"	W70° 01' 12.96"
M	110813.06	1772233.63	N41° 18' 11.26"	W70° 01' 12.96"
N	110656.80	1772019.72	N41° 18' 09.73"	W70° 01' 15.77"
O	110737.53	1771960.70	N41° 18' 10.53"	W70° 01' 16.54"
P	110863.43	1772133.05	N41° 18' 11.76"	W70° 01' 14.27"
Q	111159.37	1772129.71	N41° 18' 14.69"	W70° 01' 14.29"
R	111587.54	1771748.92	N41° 18' 18.94"	W70° 01' 19.25"
S	111626.18	1771427.42	N41° 18' 19.34"	W70° 01' 23.46"
T	111763.04	1771037.75	N41° 18' 20.71"	W70° 01' 28.56"
U	111750.59	1770922.10	N41° 18' 20.59"	W70° 01' 30.07"
V	111482.82	1770519.81	N41° 18' 17.97"	W70° 01' 35.36"
W	111500.92	1770210.65	N41° 18' 18.16"	W70° 01' 39.41"
X	111580.26	1769921.69	N41° 18' 18.96"	W70° 01' 43.19"

LEGEND:

- MLW = EL. 0.0'
- MHW = EL. +3.04'
- AHTL = EL. +4.10'
- PROPOSED MAINTENANCE DREDGING TO EL. -6.0' MLW
- EELGRASS (SEE GENERAL NOTE 10)
- EELGRASS (MA GIS 1995 & 2001)
- PROP. AREA OF RE-ALIGNED CHANNEL (NO DREDGING PROPOSED)
- HISTORIC MEAN HIGH WATER (HMHW)
- FEMA LINE
- EX./PROP. CHANNEL LIMIT/BOT.OF SLOPE
- PROP. TOP OF SLOPE

PURPOSE: PROPOSED POLPIS HARBOR ENTRANCE CHANNEL MAINTENANCE DREDGING TO IMPROVE NAVIGATION AND TIDAL FLUSHING

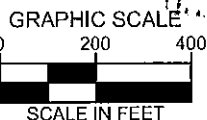
DATUM: **PERMIT NO. 14251**

MLW = 0.0
MHW = +3.04
AHTL = +4.10

Approved by Department of Environmental Protection
Date: **October 9, 2016**

CLE ENGINEERING, INC.
15 CREEK ROAD, MARION MA, 02738

SITE OVERVIEW

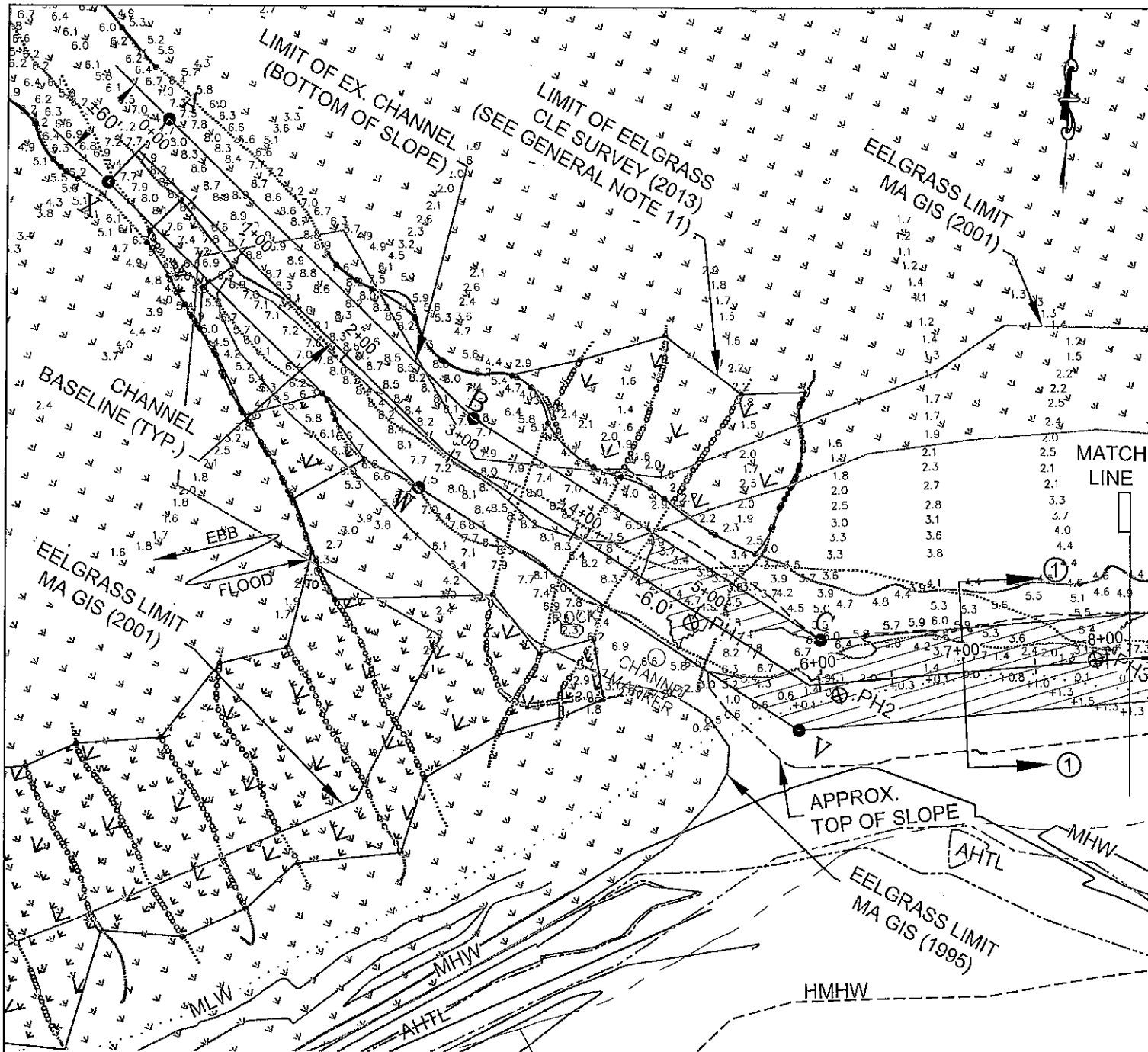


POLPIS HARBOR ENTRANCE CHANNEL MAINTENANCE DREDGING PROJECT
NANTUCKET, MASSACHUSETTS

AT: POLPIS HARBOR/NANTUCKET HARBOR
COUNTY OF: NANTUCKET
APPLICATION BY: TOWN OF NANTUCKET

DATE: APRIL 1, 2016

SHEET 2 OF 11



LEGEND:

- MLW = EL. 0.0'
- MHW = EL. +3.04'
- AHFL = EL. +4.10'
- PROPOSED MAINTENANCE DREDGING TO EL. -6.0' MLW
- EELGRASS (SEE GENERAL NOTE 10)
- EELGRASS VERIFIED BY U/W CAMERA (10/3/13)
- EELGRASS SURVEY TRANSECT (10/3/13)

LEGEND (CONTINUED):

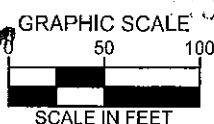
- EELGRASS (MA GIS 1995 & 2001)
- PROP. AREA OF RE-ALIGNMENT CHANNEL (NO DREDGING PROPOSED)
- HISTORIC MEAN HIGH WATER (HMLW)
- FEMA LINE
- EX./PROP. CHANNEL LIMIT/BOT.OF SLOPE
- PROP. TOP OF SLOPE

PURPOSE: PROPOSED POLPIS HARBOR ENTRANCE CHANNEL MAINTENANCE DREDGING TO IMPROVE NAVIGATION AND TIDAL FLUSHING

DATUM: **PERMIT NO. 14251**
 MLW = 0.0'
 MHW = +3.04'
 AHFL = +4.10'

CLE ENGINEERING, INC.
 15 CREEK ROAD, MARION MA, 02738

SITE PLAN



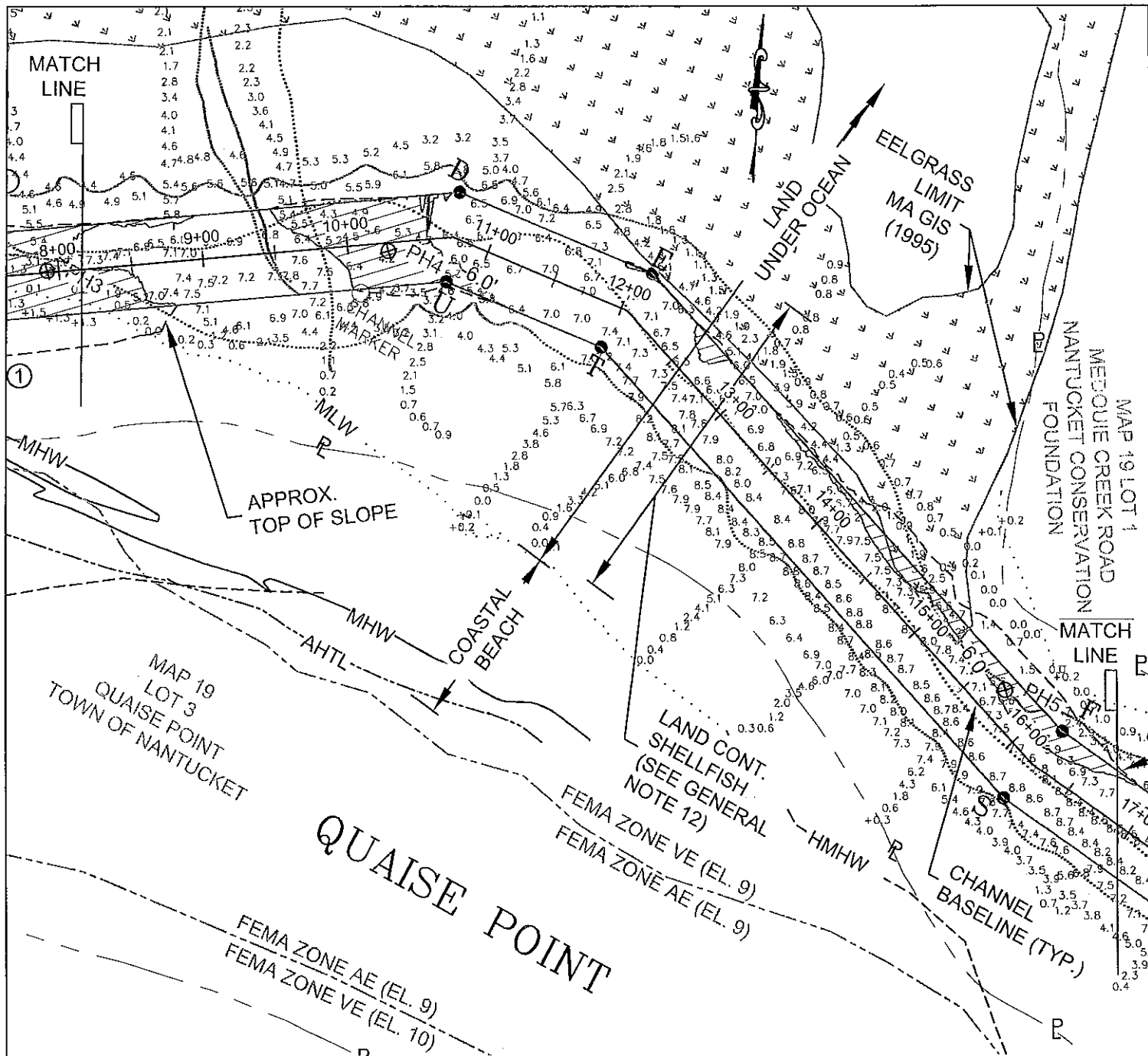
SCALE IN FEET

POLPIS HARBOR ENTRANCE CHANNEL MAINTENANCE DREDGING PROJECT
 NANTUCKET, MASSACHUSETTS

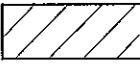
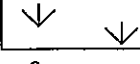
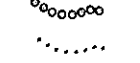
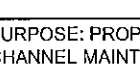
AT: POLPIS HARBOR/NANTUCKET HARBOR
 COUNTY OF: NANTUCKET
 APPLICATION BY: TOWN OF NANTUCKET

DATE: APRIL 1, 2016

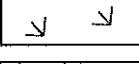
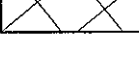
SHEET 3 OF 11



LEGEND:

- MLW = EL. 0.0'
- MHW = EL. +3.04'
- AHTL = EL. +4.10'
-  PROPOSED MAINTENANCE DREDGING TO EL. -6.0' MLW
-  EELGRASS (SEE GENERAL NOTE 10)
-  EELGRASS VERIFIED BY U/W CAMERA (10/3/13)
-  EELGRASS SURVEY TRANSECT (10/3/13)

LEGEND (CONTINUED):

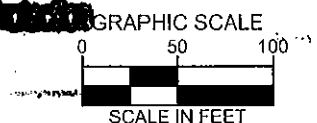
-  EELGRASS (MA GIS 1995 & 2001)
-  PROP. AREA OF RE-ALIGNED CHANNEL (NO DREDGING PROPOSED)
- HISTORIC MEAN HIGH WATER (HMHW)
- FEMA LINE
- EX./PROP. CHANNEL LIMIT/BOT. OF SLOPE
- PROP. TOP OF SLOPE

PURPOSE: PROPOSED POLPIS HARBOR ENTRANCE CHANNEL MAINTENANCE DREDGING TO IMPROVE NAVIGATION AND TIDAL FLUSHING

DATUM: **PERMIT NO. 14251**
 MLW = 0.0
 MHW = +3.04
 AHTL = +4.10
 Approved by Department of Environmental Protection
 Date: **October 4, 2016**

CLE ENGINEERING, INC.
 15 CREEK ROAD, MARION MA, 02738

SITE PLAN

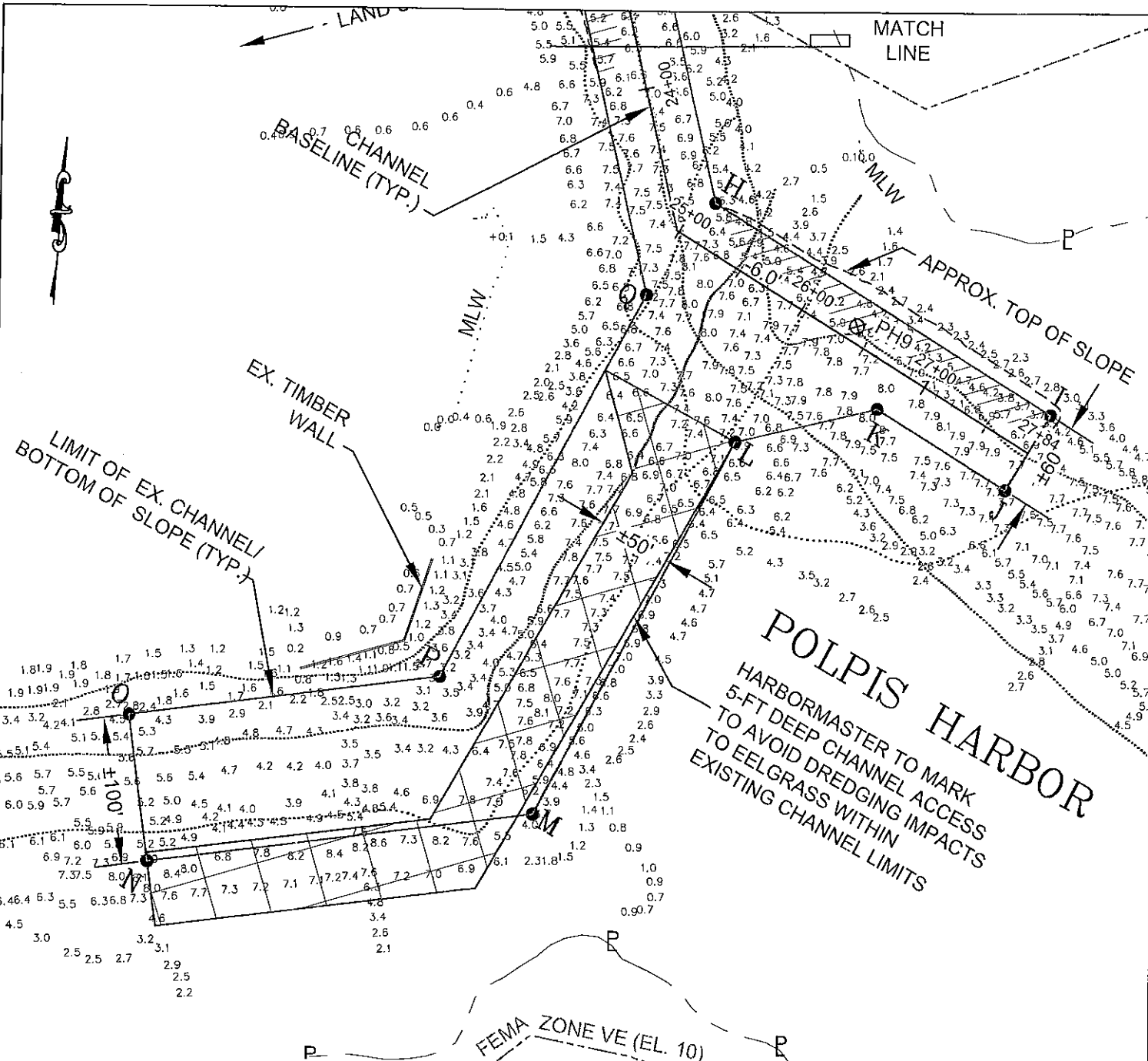


POLPIS HARBOR ENTRANCE CHANNEL MAINTENANCE DREDGING PROJECT
 NANTUCKET, MASSACHUSETTS

AT: POLPIS HARBOR/NANTUCKET HARBOR
 COUNTY OF: NANTUCKET
 APPLICATION BY: TOWN OF NANTUCKET

DATE: APRIL 1, 2016

SHEET 4 OF 11



LEGEND:

- MLW = EL. 0.0'
- MHW = EL. +3.04'
- AHTL = EL. +4.10'
- PROPOSED MAINTENANCE DREDGING TO EL. -6.0' MLW
- EELGRASS (SEE GENERAL NOTE 10)
- EELGRASS VERIFIED BY U/W CAMERA (10/3/13)
- EELGRASS SURVEY TRANSECT (10/3/13)

LEGEND (CONTINUED):

- EELGRASS (MA GIS 1995 & 2001)
- PROP. AREA OF RE-ALIGNED CHANNEL (NO DREDGING PROPOSED)
- HISTORIC MEAN HIGH WATER (HMHW)
- FEMA LINE
- EX./PROP. CHANNEL LIMIT/BOT. OF SLOPE
- PROP. TOP OF SLOPE

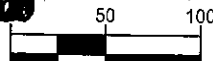
PURPOSE: PROPOSED POLPIS HARBOR ENTRANCE CHANNEL MAINTENANCE DREDGING TO IMPROVE NAVIGATION AND TIDAL FLUSHING

DATUM: **PERMIT NO. 14251**
 MLW = 0.0
 MHW = +3.04'
 AHTL = +4.10'
 Approved by Department of Environmental Protection
 Date: **October 4, 2016**

CLE ENGINEERING, INC.
 15 CREEK ROAD, MARION MA, 02738

SITE PLAN

GRAPHIC SCALE



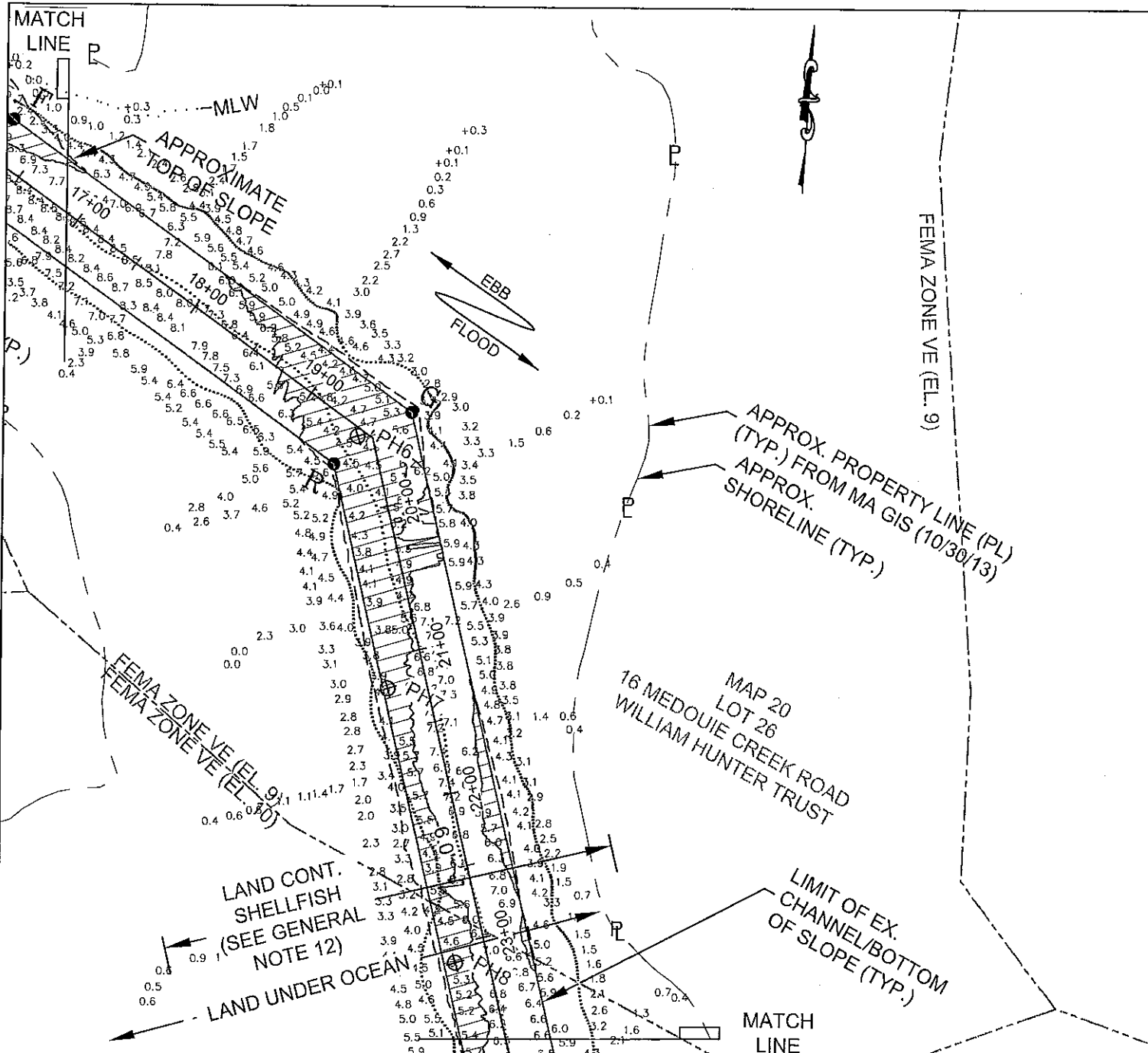
SCALE IN FEET

POLPIS HARBOR ENTRANCE CHANNEL MAINTENANCE DREDGING PROJECT
 NANTUCKET, MASSACHUSETTS


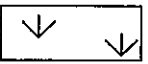


AT: POLPIS HARBOR/NANTUCKET HARBOR
 COUNTY OF: NANTUCKET
 APPLICATION BY: TOWN OF NANTUCKET

DATE: APRIL 1, 2016

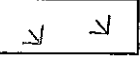

SHEET 6 OF 11



LEGEND:

- MLW = EL. 0.0'
- MHW = EL. +3.04'
- AHTL = EL. +4.10'
-  PROPOSED MAINTENANCE DREDGING TO EL. -6.0' MLW
-  EELGRASS (SEE GENERAL NOTE 10)
-  EELGRASS VERIFIED BY U/W CAMERA (10/3/13)
-  EELGRASS SURVEY TRANSECT (10/3/13)

LEGEND (CONTINUED):

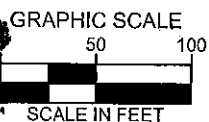
-  EELGRASS (MA GIS 1995 & 2001)
-  PROP. AREA OF RE-ALIGNED CHANNEL (NO DREDGING PROPOSED)
- HISTORIC MEAN HIGH WATER (HMHW)
- FEMA LINE
- EX./PROP. CHANNEL LIMIT/BOT. OF SLOPE
- PROP. TOP OF SLOPE

PURPOSE: PROPOSED POLPIS HARBOR ENTRANCE CHANNEL MAINTENANCE DREDGING TO IMPROVE NAVIGATION AND TIDAL FLUSHING

DATUM: **PERMIT NO. 14251**
 MLW = 0.0
 MHW = +3.04
 AHTL = +4.10
 Approved by Department of Environment
 Date: **October 4, 2016**

CLE ENGINEERING, INC.
 15 CREEK ROAD, MARION MA, 02738

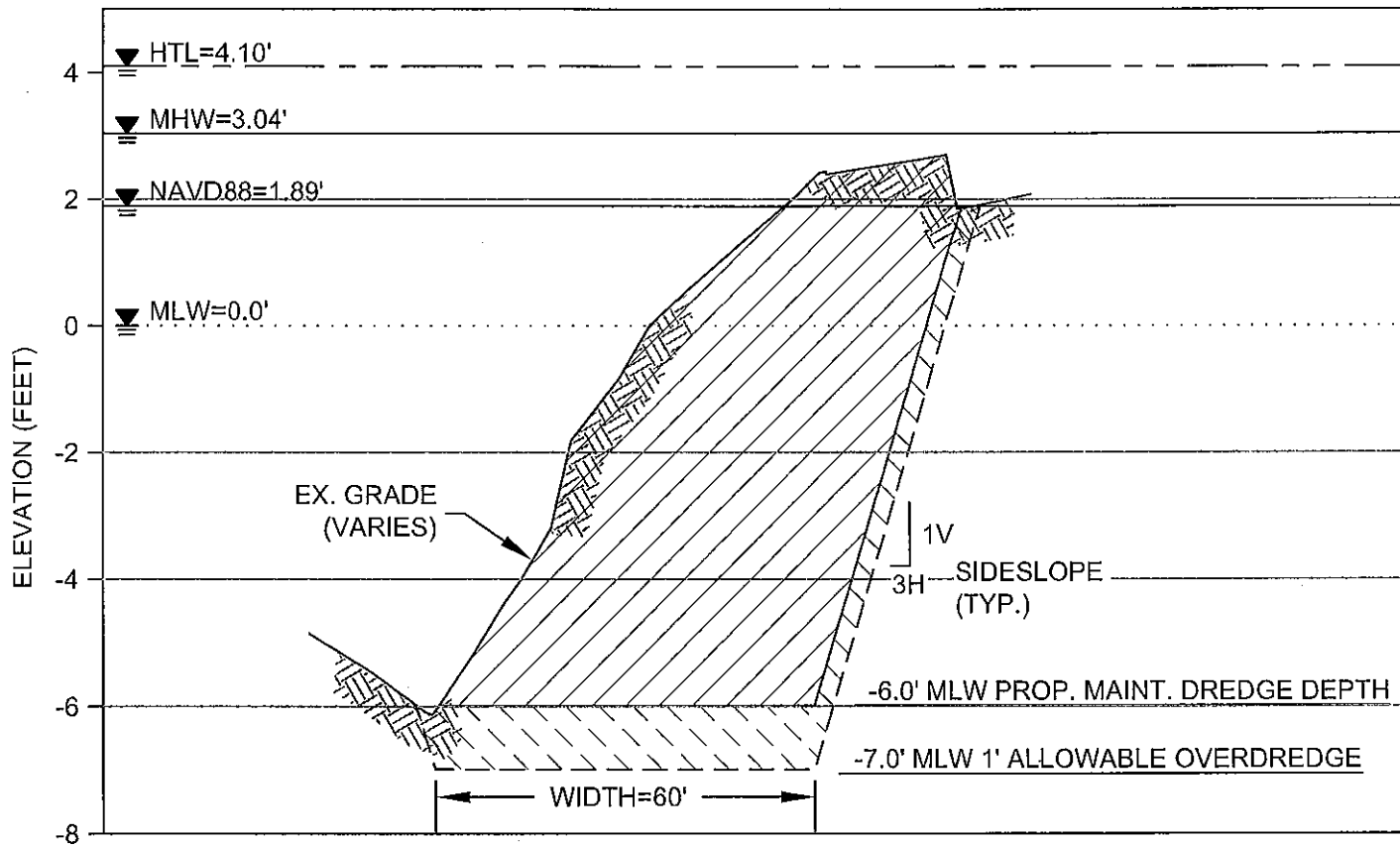
SITE PLAN



POLPIS HARBOR ENTRANCE CHANNEL MAINTENANCE DREDGING PROJECT
 NANTUCKET, MASSACHUSETTS
 AT: POLPIS HARBOR/NANTUCKET HARBOR
 COUNTY OF: NANTUCKET
 APPLICATION BY: TOWN OF NANTUCKET

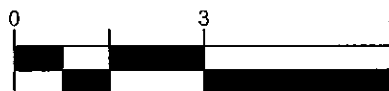
DATE: APRIL 1, 2016

SHEET 5 OF 11



STA. 7+00
TYPICAL DREDGE SECTION 1-1
 HORIZONTAL SCALE 1"=30'
 VERTICAL SCALE 1"=3'

GRAPHIC SCALE



(IN FEET)

1 INCH = 3 FEET

GRAPHIC SCALE



(IN FEET)

1 INCH = 30 FEET

PURPOSE: PROPOSED POLPIS HARBOR ENTRANCE
 CHANNEL MAINTENANCE DREDGING TO IMPROVE
 NAVIGATION AND TIDAL FLUSHING

DATUM:
 MLW = 0.0
 MHW = +3.04'
 AHTL = +4.10'

PERMIT NO. 14251

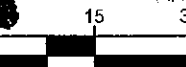
Approved by Department of Environmental Protection

Date: **October 9, 2016**

CLE ENGINEERING, INC.
 15 CREEK ROAD, MARION MA, 02738

**TYPICAL CROSS
 SECTION**

GRAPHIC SCALE



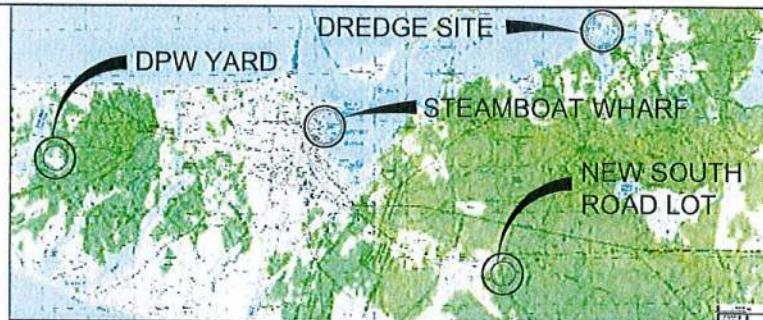
SCALE IN FEET

POLPIS HARBOR ENTRANCE CHANNEL MAINTENANCE
 DREDGING PROJECT
 NANTUCKET, MASSACHUSETTS

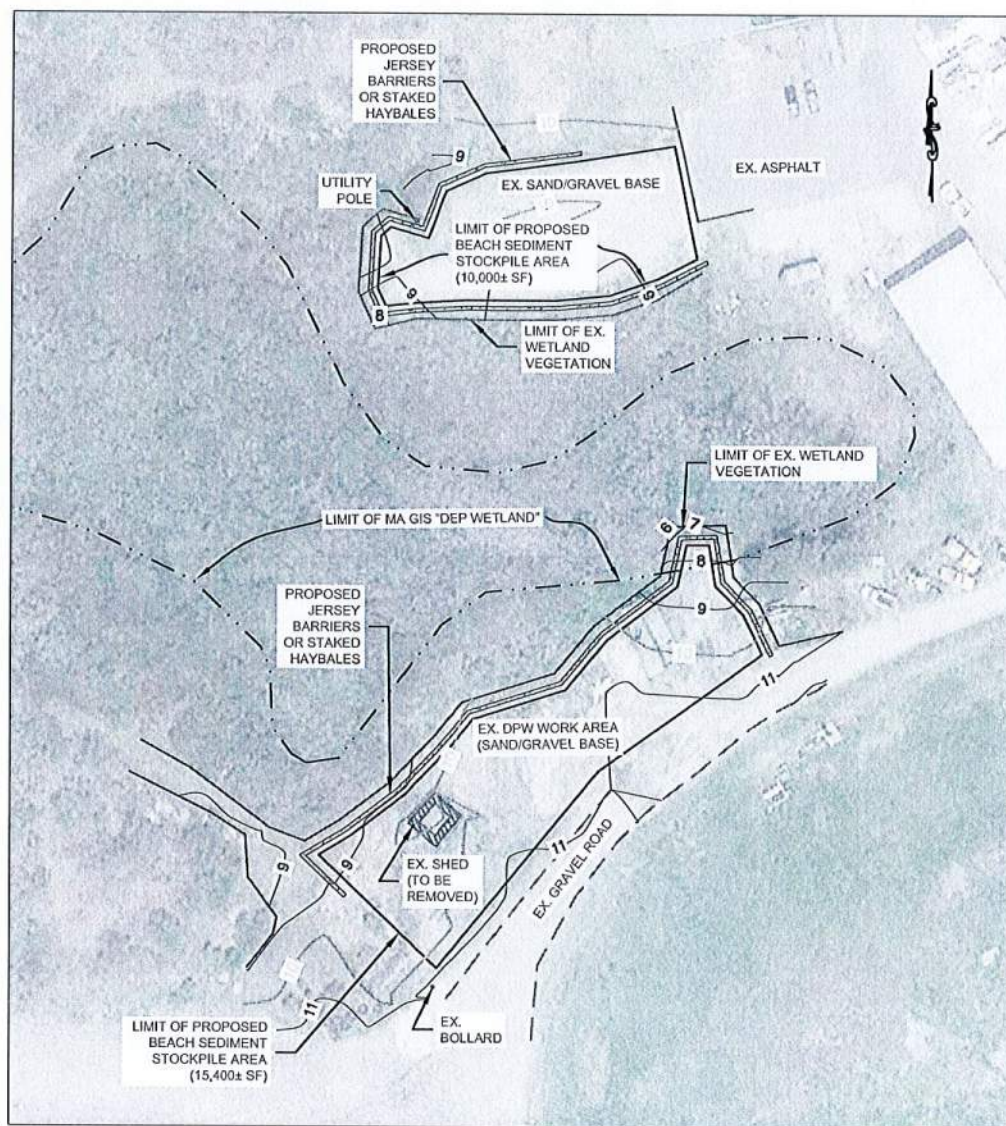
AT: POLPIS HARBOR/NANTUCKET HARBOR
 COUNTY OF: NANTUCKET
 APPLICATION BY: TOWN OF NANTUCKET

DATE: APRIL 1, 2016

SHEET 7 OF 11



STOCKPILE AREA LOCUS MAP 1"=13,000 FT



STOCKPILE AREA
DPW YARD (188 MADAKET ROAD)
SCALE: 1"=100'

PURPOSE: PROPOSED POLPIS HARBOR ENTRANCE
CHANNEL MAINTENANCE DREDGING TO IMPROVE
NAVIGATION AND TIDAL FLUSHING

DATUM:
MLW = 0.0
MHW = +3.04'
AHTL = +4.10'

PERMIT NO. 14251

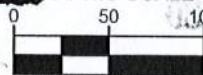
Approved by Department of Environmental Protection

Date: October 9, 2016

CLE ENGINEERING, INC.
15 CREEK ROAD, MARION MA, 02738

DREDGE SEDIMENT STOCKPILE PLAN

GRAPHIC SCALE



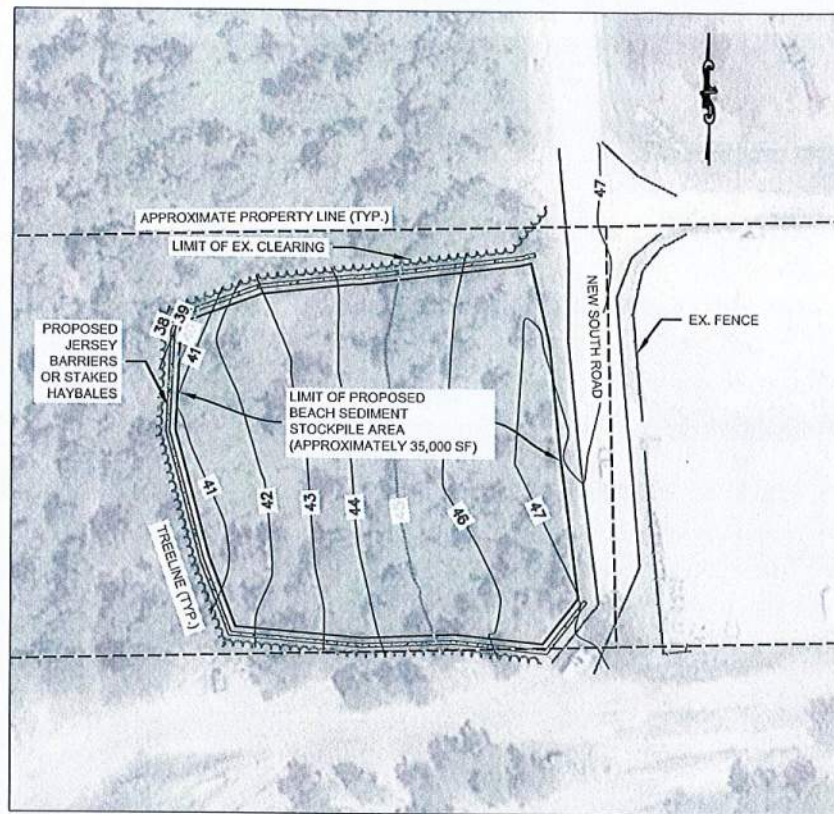
SCALE IN FEET

POLPIS HARBOR ENTRANCE CHANNEL MAINTENANCE
DREDGING PROJECT
NANTUCKET, MASSACHUSETTS

AT: POLPIS HARBOR/NANTUCKET HARBOR
COUNTY OF: NANTUCKET
APPLICATION BY: TOWN OF NANTUCKET

DATE: APRIL 1, 2016

SHEET 8 OF 11



STOCKPILE AREA
VACANT LOT (NEW SOUTH ROAD)
 SCALE: 1"=100'

STOCKPILE AREA NOTES:

1. VERTICAL DATUM: NAVD88
2. RESULTS OF TOPOGRAPHY FROM CLE ENGINEERING, INC. (CLE) SURVEY DATED 2/4/16.
3. LIMITS OF WETLAND VEGETATION AS SHOWN WERE FIELD VERIFIED ON 2/4/16. LIMITS OF DEP WETLANDS (SHRUB SWAMP) ARE BASED UPON AVAILABLE MA GIS INFORMATION.
4. PROJECT BENCHMARK IS DISK 8449130 H EL. 5.78' MLLW (3.69' NAVD88) LOCATED AT THE CHILDRENS BEACH BOAT RAMP IN NANTUCKET, MA.
5. COORDINATES ARE BASED ON NAD 83 STATE PLANE MASSACHUSETTS ISLAND.
6. PROPERTY LINES SHOWN ARE APPROXIMATE. INFORMATION OBTAINED FROM NANTUCKET GIS DATABASE.
7. DPW YARD STOCKPILE AREA IS LOCATED IN FEMA ZONE X AS SHOWN ON MAP 25019C066G DATED JUNE 9, 2014.
8. NEW SOUTH ROAD VACANT LOT STOCKPILE AREA IS LOCATED IN FEMA ZONE X AS SHOWN ON MAP 25019C0093G DATED JUNE 9, 2014.
9. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES SHOWN, AND CAN ONLY BE CONSIDERED AS INDICATING THE CONDITIONS AT THAT TIME.
10. POSSESSION AND USE OF THE MATERIAL CONTAINED ON THESE DRAWINGS IS GRANTED ONLY IN CONNECTION WITH ITS USE AS IT RELATES TO THE TITLED PROJECT. ANY OTHER USE, REPRODUCTION OR DISCLOSURE OF THE INFORMATION CONTAINED HEREON IS EXPRESSLY PROHIBITED WITHOUT THE WRITTEN CONSENT OF CLE ENGINEERING INC.

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PURPOSE: PROPOSED POLPIS HARBOR ENTRANCE
 CHANNEL MAINTENANCE DREDGING TO IMPROVE
 NAVIGATION AND TIDAL FLUSHING

DATUM:
 MLW = 0.0
 MHW = +3.04'
 AHTL = +4.10'

CLE ENGINEERING, INC.
 15 CREEK ROAD, MARION MA, 02738

**DREDGE SEDIMENT
 STOCKPILE PLAN &
 NOTES**



POLPIS HARBOR ENTRANCE CHANNEL MAINTENANCE
 DREDGING PROJECT
 NANTUCKET, MASSACHUSETTS

AT: POLPIS HARBOR/NANTUCKET HARBOR
 COUNTY OF: NANTUCKET
 APPLICATION BY: TOWN OF NANTUCKET

DATE: APRIL 1, 2016

SHEET 9 OF 11

PERMIT NO. 14251

Approved by Department of Environmental Protection

Date: **October 4, 2016**



PURPOSE: PROPOSED POLPIS HARBOR ENTRANCE CHANNEL MAINTENANCE DREDGING TO IMPROVE NAVIGATION AND TIDAL FLUSHING

DATUM:
MLW = 0.0
MHW = +3.04'
AHTL = +4.10'

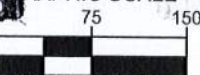
PERMIT NO. 14251

Approved by Department of Environmental Protection
Date: *October 4, 2016*

CLE ENGINEERING, INC.
15 CREEK ROAD, MARION MA, 02738

SITE PLAN: ACCESS ROAD

GRAPHIC SCALE



SCALE IN FEET

POLPIS HARBOR ENTRANCE CHANNEL MAINTENANCE DREDGING PROJECT
NANTUCKET, MASSACHUSETTS

AT: POLPIS HARBOR/NANTUCKET HARBOR
COUNTY OF: NANTUCKET
APPLICATION BY: TOWN OF NANTUCKET

DATE: APRIL 1, 2016

SHEET 10 OF 11

GENERAL NOTES:

1. VERTICAL DATUM: MEAN LOW WATER (MLW) = 0.0'; NAVD88 = 1.89'; MEAN HIGH WATER (MHW) = 3.04'; ANNUAL HIGH TIDE LINE (AHTL) = 4.10'.
2. RESULTS OF HYDROGRAPHY FROM CLE ENGINEERING, INC. (CLE) SURVEY DATED 10/2/13, 10/3/13 & 10/22/13. SOUNDINGS ARE IN FEET AND TENTHS, AND REFER TO DEPTHS BELOW MLW. RESULTS OF TOPOGRAPHIC SURVEY FROM SURVEY DATED 10/22/13.
3. SEDIMENT SAMPLES COLLECTED BY TG+B MARINE SERVICES, INC. ON 5/8/14.
4. ALL DREDGE SEDIMENTS TO BE BENEFICIALLY RE-USED FOR PERMITTED COMPATIBLE BEACH NOURISHMENT SITES ACROSS THE ISLAND. DREDGE SEDIMENTS WILL BE DEWATERED, UNLOADED INTO DUMP TRUCKS AT THE STEAMSHIP AUTHORITY DOCK, AND TRANSFERRED TO A STOCKPILE AREA LOCATED AT THE TOWN OF NANTUCKET DEPARTMENT OF PUBLIC WORKS YARD AT 188 MADAKET ROAD, NANTUCKET, MA.
5. LIMITS OF FRESH WATER WETLANDS, AS SHOWN, HAVE NOT BEEN DELINEATED. LIMITS ARE APPROXIMATE AND BASED UPON AVAILABLE MAGIS INFORMATION AND OBSERVED FIELD CONDITIONS.
6. PROJECT BENCHMARK IS DISK 9130 K 1981 LOCATED AT THE BRANDT POINT USCG STATION IN NANTUCKET, MA. SITE BENCHMARK IS HUB SET ON BEACH AT ENTRANCE TO POLPIS HARBOR AT EL. +3.91' MLW.
7. COORDINATES ARE BASED ON NAD 83 STATE PLANE MASSACHUSETTS ISLAND.
8. CHANNEL LIMITS SCALED IN BY CLE BASED UPON EXISTING PROJECT PLAN TITLED "PROPOSED HARBOR MAINTENANCE DREDGING AND BEACH NOURISHMENT, POLPIS HARBOR NANTUCKET, MA" MA DEM CONTRACT NO 3253.
9. CHANNEL MARKERS AND EX. TIMBER CHANNEL WALL LOCATION LOCATED IN THE FIELD WITH DGPS DURING TIME OF HYDROGRAPHIC SURVEY.
10. LIMITS OF EELGRASS INTERPOLATED BASED UPON TRANSECT LINES SURVEYED BY CLE ON DATES 10/2/13, 10/3/13, 10/22/13 & 10/23/13.
11. LAND CONTAINING SHELLFISH AREAS, AS SHOWN, ARE BASED UPON THE MOST CURRENT AVAILABLE MA GIS DATA OF WHICH REPRESENTS "POTENTIALLY SUITABLE HABITAT," AS IDENTIFIED BY MA DIV. OF MARINE FISHERIES. NO SHELLFISH SURVEY HAS BEEN PERFORMED TO CONFIRM PRESENCE OF ACTUAL HABITAT.
12. LIMITS OF EXISTING REMNANT DEGRADED/OVERWAHSED SALT MARSH, AS SHOWN, ARE APPROXIMATE AND REFLECT BOTH FIELD SURVEY & VISUAL OBSERVATIONS MADE BY CLE ON 10/12/13 & 5/8/14 RESPECTIVELY.
13. PROPERTY LINE INFORMATION FROM MA GIS DATABASE.
14. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES SHOWN, AND CAN ONLY BE CONSIDERED AS INDICATING THE CONDITIONS AT THAT TIME. INTERPOLATED INFORMATION FROM BETWEEN SOUNDING RUNS IS NOT GUARANTEED. SHOALS, OBSTRUCTIONS OR OTHER DIFFERING CONDITIONS MAY EXIST BETWEEN THESE RUNS. CONSULT WITH CLE ENGINEERING FOR MORE DETAILED INFORMATION.
15. POSSESSION AND USE OF THE MATERIAL CONTAINED ON THESE DRAWINGS IS GRANTED ONLY IN CONNECTION WITH ITS USE AS IT RELATES TO THE TITLED PROJECT. ANY OTHER USE, REPRODUCTION OR DISCLOSURE OF THE INFORMATION CONTAINED HEREON IS EXPRESSLY PROHIBITED WITHOUT THE WRITTEN CONSENT OF CLE ENGINEERING INC.

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DREDGE NOTES:

1. ALL PROPOSED MAINTENANCE DREDGING SHALL BE TO A DEPTH OF -6.0' MLW WITH A 1-FT ALLOWABLE OVERDREDGE TO A DEPTH OF -7.0' MLW.
2. PROPOSED LIMITS OF DREDGING ARE CONSISTENT WITHIN THOSE LAST AUTHORIZED UNDER THE FOLLOWING REGULATORY APPROVALS:
 - MEPA ENF/SECRETARY CERT. EEA NO. 8868, ISSUED 12/5/1991.
 - MA DEP CHAPTER 91 PERMIT #229, ISSUED 7/2/1992.
 - ORDER OF CONDITIONS MA DEP FILE #SE 48-699, ISSUED 2/21/1992.
 - MA DEP WQ CERT TRANS# 21929, ISSUED 5/29/1992; REV. 3/8/1993.
 - U.S. ARMY CORPS OF ENGINEERS PERMIT #1991-02370, ISSUED 6/1/1992.
3. TOTAL ESTIMATED DREDGE VOLUME = ±8,300 CY (INCLUDES 1' ALLOWABLE OVERDREDGE & 3H:1V SIDESLOPES). TOTAL ESTIMATED DREDGE AREA = ±69,039 SF (INCLUDES 3H:1V SIDESLOPES).

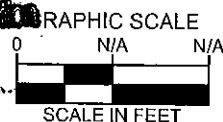
SURVEY NOTES:

PROJECT NAME: POLPIS HARBOR
PROJECT NUMBER: 12118
PLOT SCALE: 1"=100'
SURVEY DATE: 10/2/13, 10/3/13, 10/22/13
SURVEYOR: M.COUNT, J. GUARD
VESSEL: CLE LOWE
TRANS./FATH.: 200KHZ, NARROW BEAM, ODOM MKII,
WEATHER COND: MOSTLY SUNNY, WIND LIGHT WSW, SEAS CALM
PROJECT DATUM: MLW
COORD. SYSTEM: NAD-83, MASS ISLAND
DATA REDUCTION: SOUNDING DATA SORTED WHYPACK, 1' RADIUS
TIDAL DATA: SCREW SET AT EL. +3.21' MLW ON TIMBER CHANNEL WALL TO SET TIDEBOARD
BENCHMARK: PROJECT BENCHMARK IS DISK 9130 K 1981 AT USCG STATION BRANDT POINT, NANTUCKET EL. +4.84' MLW. SITE BENCHMARK IS HUB SET ON BEACH EL. +3.91' MLW

PURPOSE: PROPOSED POLPIS HARBOR ENTRANCE CHANNEL MAINTENANCE DREDGING TO IMPROVE NAVIGATION AND TIDAL FLUSHING

DATUM: **PERMIT NO. 14251**
MLW = 0.0
MHW = +3.04'
AHTL = +4.10'
Approved by Department of Environmental Protection
Date: October 4, 2016
CLE ENGINEERING, INC.
15 CREEK ROAD, MARION MA, 02738

NOTES



POLPIS HARBOR ENTRANCE CHANNEL MAINTENANCE DREDGING PROJECT
NANTUCKET, MASSACHUSETTS

AT: POLPIS HARBOR/NANTUCKET HARBOR
COUNTY OF: NANTUCKET
APPLICATION BY: TOWN OF NANTUCKET

DATE: APRIL 1, 2016

SHEET 11 OF 11

**DEPARTMENT OF THE ARMY
U.S ARMY CORPS OF ENGINEERS
NEW ENGLAND DISTRICT**

General Permit No. NAE-2014-01550

ATTACHMENTS



DEPARTMENT OF THE ARMY
US ARMY CORPS OF ENGINEERS
NEW ENGLAND DISTRICT
696 VIRGINIA ROAD
CONCORD MA 01742-2751

September 19, 2016

Regulatory Division
File Number: NAE-2014-01550

Town of Nantucket, Massachusetts
David Fronzuto
16 Broad Street
Nantucket, Massachusetts 02554

Dear Mr. Fronzuto:

We have reviewed your application to annually maintenance dredge up to 1.58 acres of the entrance channel to -6' MLW, plus 1' allowable overdredge, for up to 8,300 CY of sandy sediment. The sediment will be hydraulically or mechanically dredged, dewatered in barges at the dredge site, and transported to the Steamship Authority Wharf to be transferred into dump trucks. The sediment will then be stockpiled at the town-owned DPW yard and vacant lot off New South Road for future beach nourishment on area beaches. This project is located in Polpis Harbor at Nantucket Island, Massachusetts. The work is shown on the enclosed plans entitled "POLPIS HARBOR ENTRANCE CHANNEL MAINTENANCE DREDGING PROJECT, NANTUCKET MASSACHUSETTS", on 11 sheets, and dated "APRIL 1, 2016".

Based on the information you have provided, we have determined that the proposed activity, which includes work and/or a discharge of dredged or fill material into waters of the United States, including wetlands, will have only minimal individual or cumulative environmental impacts. Therefore, this work is authorized under the enclosed February 2015 General Permits for Massachusetts (GPs for MA), specifically GP 5, under the pre-construction notification process. This work must be performed in accordance with the terms and conditions of the GPs and also in compliance with the following special condition(s):

1. The work authorized herein shall not be conducted during the time of year (TOY) restriction of March 16 to October 3, in order to minimize adverse impacts to federally listed endangered species.
2. You must complete and return the enclosed Work Start Notification Form to this office at least two weeks before the anticipated starting date.
3. The National Marine Fisheries Service has provided the following Essential Fish Habitat conservation recommendation in accordance with the Magnuson-Stevens Fishery Conservation and Management Act.

Condition 3a: The work authorized herein shall not be conducted during the time of year (TOY) restriction of 15 January to 31 May, in order to minimize adverse impacts to winter flounder EFH.

You are responsible for complying with all of the GP requirements. Please review the enclosed GPs for MA document carefully, in particular the general conditions beginning on Page 23, to familiarize yourself with its contents. You should ensure that whoever does the work fully understands the requirements and that a copy of the permit document and this authorization letter are at the project site throughout the time the work is underway.

This permit does not obviate the need to obtain other Federal, state, or local authorizations required by law, as listed on Page 57 of the GP document. Performing work not specifically authorized by this determination or failing to comply with any special condition(s) provided above or all the terms and conditions of the GP may subject you to the enforcement provisions of our regulations.

This determination becomes valid only after the Massachusetts Department of Environmental Protection (MassDEP) issues or waives Water Quality Certification (WQC) as required under Section 401 of the Clean Water Act. In the event the MassDEP denies the 401 WQC, this determination becomes null and void. The address of the MassDEP Regional office for your area is provided on page 62 of the enclosed GP document.

Your project is located within, or may affect resources within the coastal zone. The Massachusetts Office of Coastal Zone Management (CZM) has already determined that no further Federal Consistency Review is required.

This authorization presumes that the work as described above and as shown on your plans noted above is in waters of the U.S. You may submit a request for an approved jurisdictional determination to this office in writing if you desire.

This authorization expires on February 4, 2020. You must commence or have under contract to commence the work authorized herein by February 4, 2020 and complete the work by February 4, 2021. If you do not, you must contact this office to determine the need for further authorization before beginning or continuing the activity. We recommend you contact us *before* this permit expires to discuss a time extension or permit reissuance.

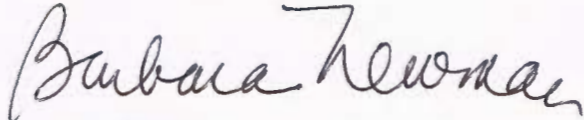
You must contact us immediately to discuss modification of this authorization if you change the plans or construction methods for work within our jurisdiction. This office must approve any changes before you undertake them.

Please contact nearby aquaculturists before each dredging event and inform them of when and where the dredging will occur.

We continually strive to improve our customer service. In order for us to better serve you, we would appreciate your completing our Customer Service Survey located at http://corpsmapu.usace.army.mil/cm_apex/f?p=regulatory_survey.

Please contact Phillip Nimeskern of my staff at (978) 318-8660 if you have any questions.

Sincerely,



Barbara Newman
Chief, Permits & Enforcement Branch
Regulatory Division

Enclosures

cc:

Michael Count, CLE Engineering, 15 Creek Road, Marion, MA 02738

MCount@cleengineering.com

Ed Reiner, U.S. EPA, Region 1, Boston, Massachusetts, reiner.ed@epa.gov

Alison Verkade, NOAA; alison.verkade@noaa.gov

Robert Boeri, Coastal Zone Management, Boston, Massachusetts, Robert.Boeri@state.ma.us

Jim Mahala, Acting Chief, DEP SERO, Wetlands and Waterways, Lakeville, Massachusetts;
jim.mahala@state.ma.us (DEP File No. X269790)

Ken Chin, MassDEP, ken.chin@state.ma.us

Michael Girvan, MassDEP-WRP, Boston, Massachusetts; michael.girvan@state.ma.us ,
(DEP File No. X269790)

Steve Pothier, Waterways Management Section, First Coast Guard District (dpw), Boston,
Massachusetts; steven.r.pothier@uscg.mil

Nantucket Conservation Commission, 2 Bathing Beach Road, Nantucket, MA, 02554.
jcarlson@nantucket-ma.gov ; jcuppone@nantucket-ma.gov

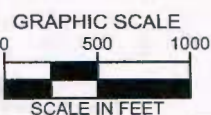


PURPOSE: PROPOSED POLPIS HARBOR ENTRANCE CHANNEL MAINTENANCE DREDGING TO IMPROVE NAVIGATION AND TIDAL FLUSHING

DATUM:
MLW = 0.0
MHW = +3.04'
AHTL = +4.10'

CLE ENGINEERING, INC.
15 CREEK ROAD, MARION MA, 02738

LOCUS MAP

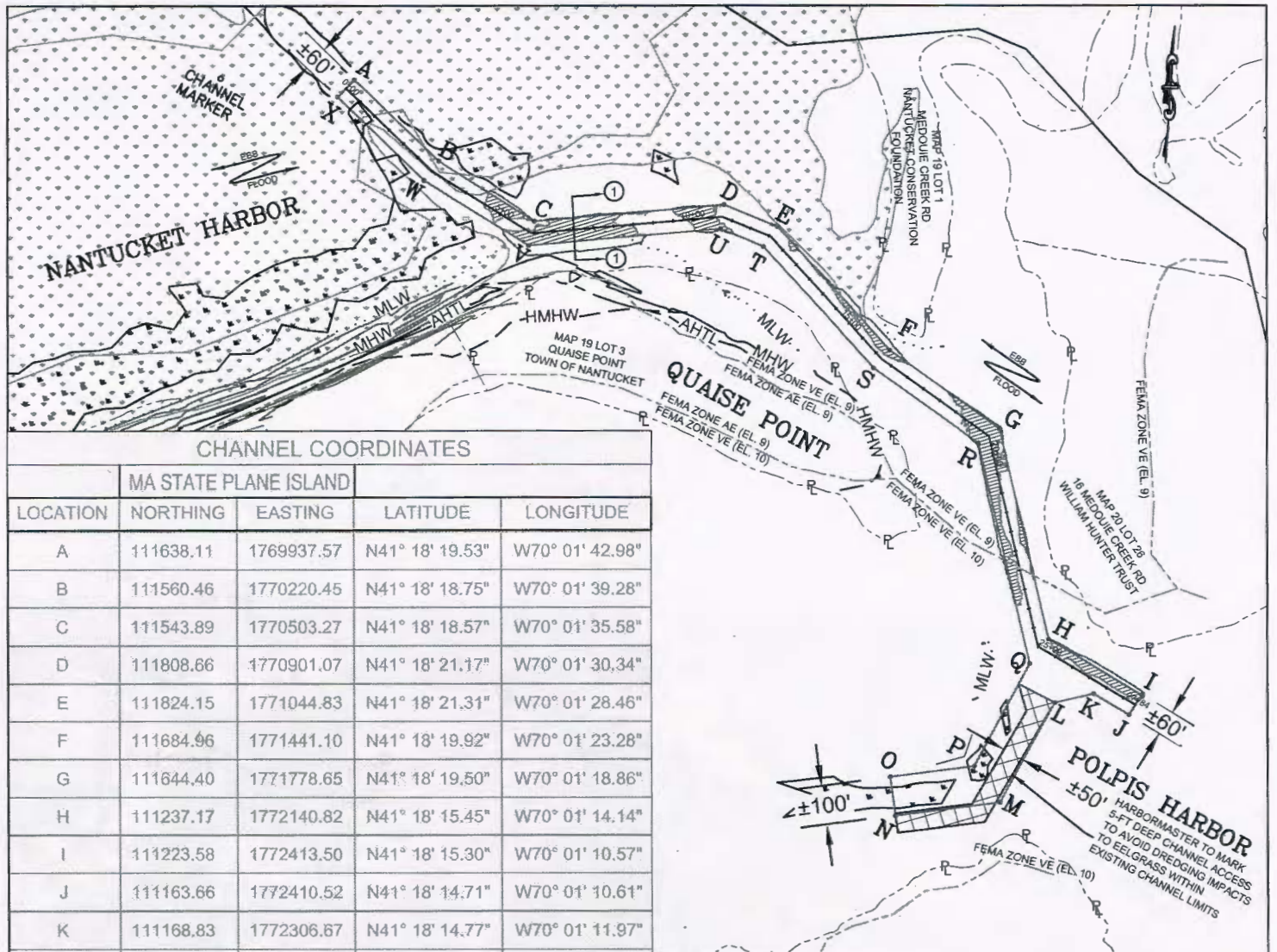


POLPIS HARBOR ENTRANCE CHANNEL MAINTENANCE DREDGING PROJECT
NANTUCKET, MASSACHUSETTS

AT: POLPIS HARBOR/NANTUCKET HARBOR
COUNTY OF: NANTUCKET
APPLICATION BY: TOWN OF NANTUCKET

DATE: APRIL 1, 2016

SHEET 1 OF 11



LEGEND:

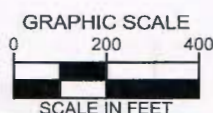
- MLW = EL. 0.0'
- MHW = EL. +3.04'
- AHTL = EL. +4.10'
- PROPOSED MAINTENANCE DREDGING TO EL. -6.0' MLW
- EELGRASS (SEE GENERAL NOTE 10)
- EELGRASS (MA GIS 1995 & 2001)
- PROP. AREA OF RE-ALIGNED CHANNEL (NO DREDGING PROPOSED)
- HISTORIC MEAN HIGH WATER (HMHV)
- FEMA LINE
- EX./PROP. CHANNEL LIMIT/BOT.OF SLOPE
- PROP. TOP OF SLOPE

PURPOSE: PROPOSED POLPIS HARBOR ENTRANCE CHANNEL MAINTENANCE DREDGING TO IMPROVE NAVIGATION AND TIDAL FLUSHING

DATUM:
MLW = 0.0
MHW = +3.04'
AHTL = +4.10'

CLE ENGINEERING, INC.
15 CREEK ROAD, MARION MA, 02738

SITE OVERVIEW

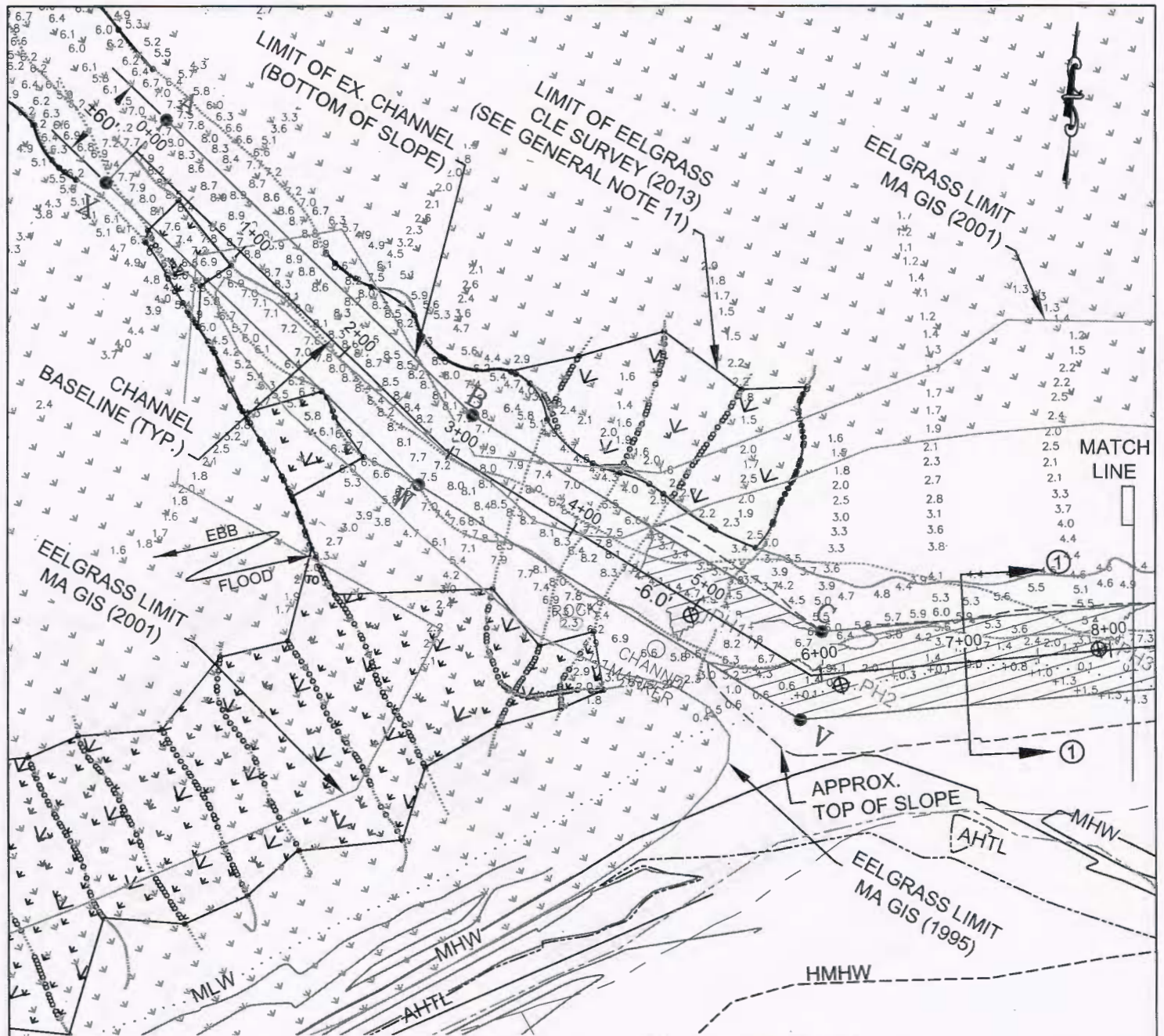


POLPIS HARBOR ENTRANCE CHANNEL MAINTENANCE DREDGING PROJECT
NANTUCKET, MASSACHUSETTS


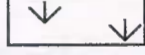

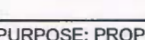
AT: POLPIS HARBOR/NANTUCKET HARBOR
COUNTY OF: NANTUCKET
APPLICATION BY: TOWN OF NANTUCKET

DATE: APRIL 1, 2016

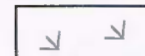

SHEET 2 OF 11



LEGEND:

- MLW = EL. 0.0'
- MHW = EL. +3.04'
- AHTL = EL. +4.10'
-  PROPOSED MAINTENANCE DREDGING TO EL. -6.0' MLW
-  EELGRASS (SEE GENERAL NOTE 10)
-  EELGRASS VERIFIED BY U/W CAMERA (10/3/13)
-  EELGRASS SURVEY TRANSECT (10/3/13)

LEGEND (CONTINUED):

-  EELGRASS (MA GIS 1995 & 2001)
-  PROP. AREA OF RE-ALIGNED CHANNEL (NO DREDGING PROPOSED)
- HISTORIC MEAN HIGH WATER (HMHW)
- FEMA LINE
- EX./PROP. CHANNEL LIMIT/BOT.OF SLOPE
- PROP. TOP OF SLOPE

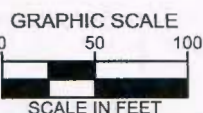
PURPOSE: PROPOSED POLPIS HARBOR ENTRANCE CHANNEL MAINTENANCE DREDGING TO IMPROVE NAVIGATION AND TIDAL FLUSHING

DATUM:

MLW = 0.0
MHW = +3.04'
AHTL = +4.10'

CLE ENGINEERING, INC.
15 CREEK ROAD, MARION MA, 02738

SITE PLAN

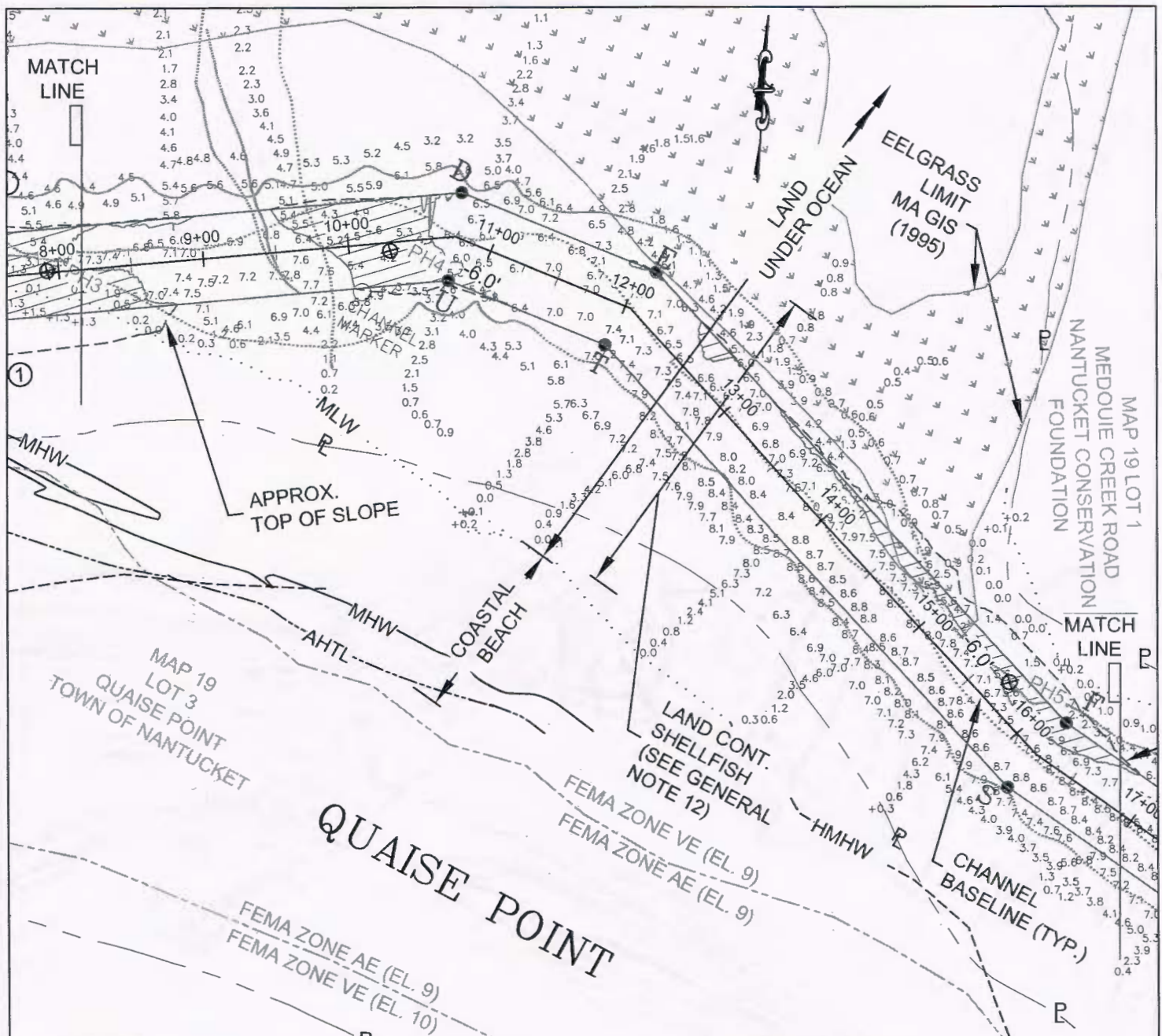


POLPIS HARBOR ENTRANCE CHANNEL MAINTENANCE DREDGING PROJECT
NANTUCKET, MASSACHUSETTS


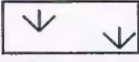

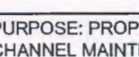
AT: POLPIS HARBOR/NANTUCKET HARBOR
COUNTY OF: NANTUCKET
APPLICATION BY: TOWN OF NANTUCKET

DATE: APRIL 1, 2016

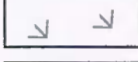

SHEET 3 OF 11



LEGEND:

- MLW = EL. 0.0'
- MHW = EL. +3.04'
- AHTL = EL. +4.10'
-  PROPOSED MAINTENANCE DREDGING TO EL. -6.0' MLW
-  EELGRASS (SEE GENERAL NOTE 10)
-  EELGRASS VERIFIED BY U/W CAMERA (10/3/13)
-  EELGRASS SURVEY TRANSECT (10/3/13)

LEGEND (CONTINUED):

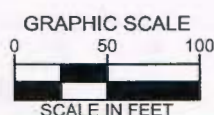
-  EELGRASS (MA GIS 1995 & 2001)
-  PROP. AREA OF RE-ALIGNED CHANNEL (NO DREDGING PROPOSED)
- HISTORIC MEAN HIGH WATER (HMHW)
- FEMA LINE
- EX./PROP. CHANNEL LIMIT/BOT.OF SLOPE
- PROP. TOP OF SLOPE

PURPOSE: PROPOSED POLPIS HARBOR ENTRANCE CHANNEL MAINTENANCE DREDGING TO IMPROVE NAVIGATION AND TIDAL FLUSHING

DATUM:
MLW = 0.0
MHW = +3.04'
AHTL = +4.10'

CLE ENGINEERING, INC.
15 CREEK ROAD, MARION MA, 02738

SITE PLAN

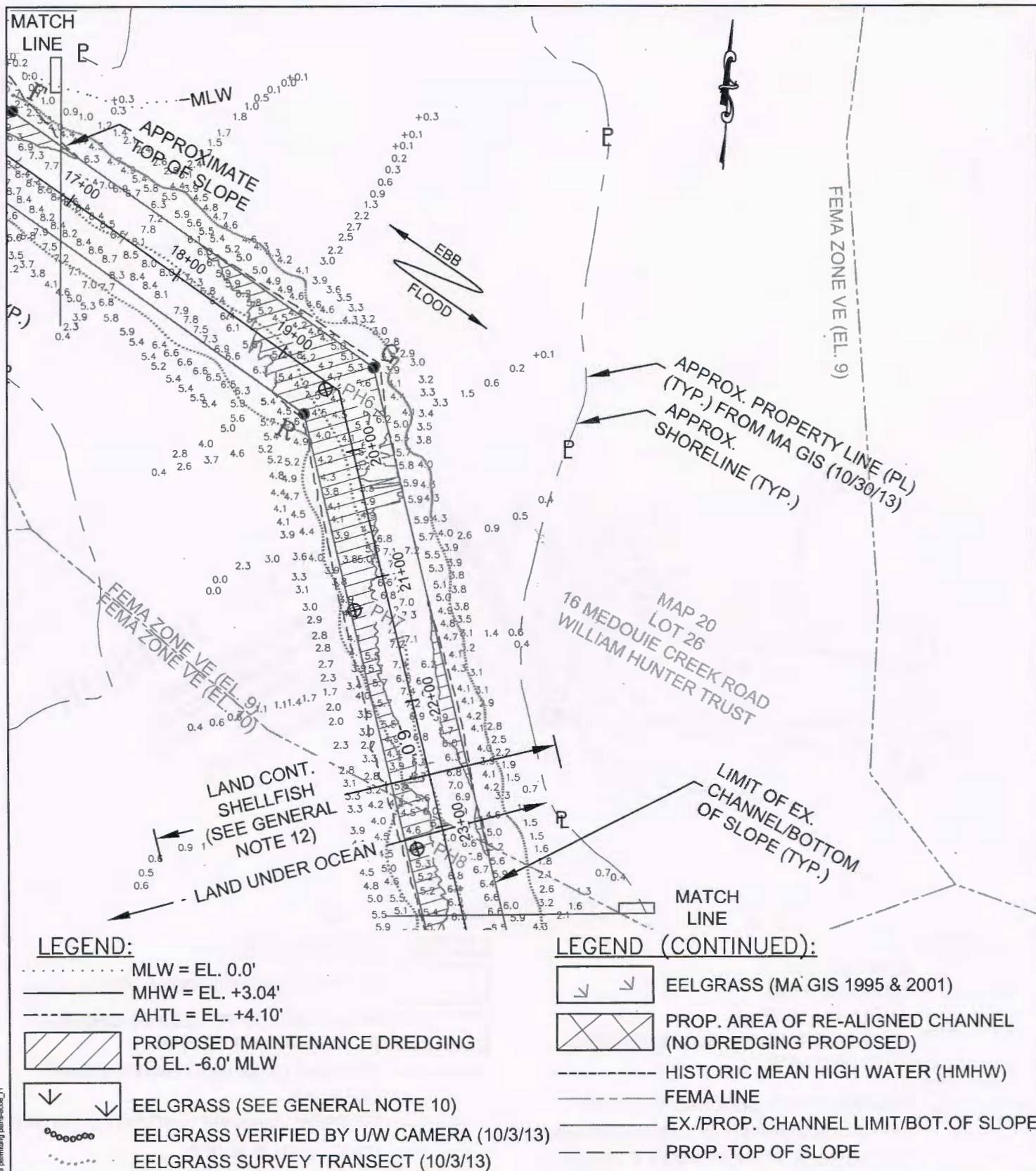


POLPIS HARBOR ENTRANCE CHANNEL MAINTENANCE DREDGING PROJECT
NANTUCKET, MASSACHUSETTS

AT: POLPIS HARBOR/NANTUCKET HARBOR
COUNTY OF: NANTUCKET
APPLICATION BY: TOWN OF NANTUCKET

DATE: APRIL 1, 2016

SHEET 4 OF 11

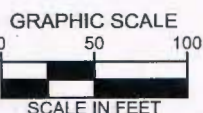


PURPOSE: PROPOSED POLPIS HARBOR ENTRANCE CHANNEL MAINTENANCE DREDGING TO IMPROVE NAVIGATION AND TIDAL FLUSHING

DATUM:
MLW = 0.0
MHW = +3.04'
AHTL = +4.10'

CLE ENGINEERING, INC.
15 CREEK ROAD, MARION MA, 02738

SITE PLAN

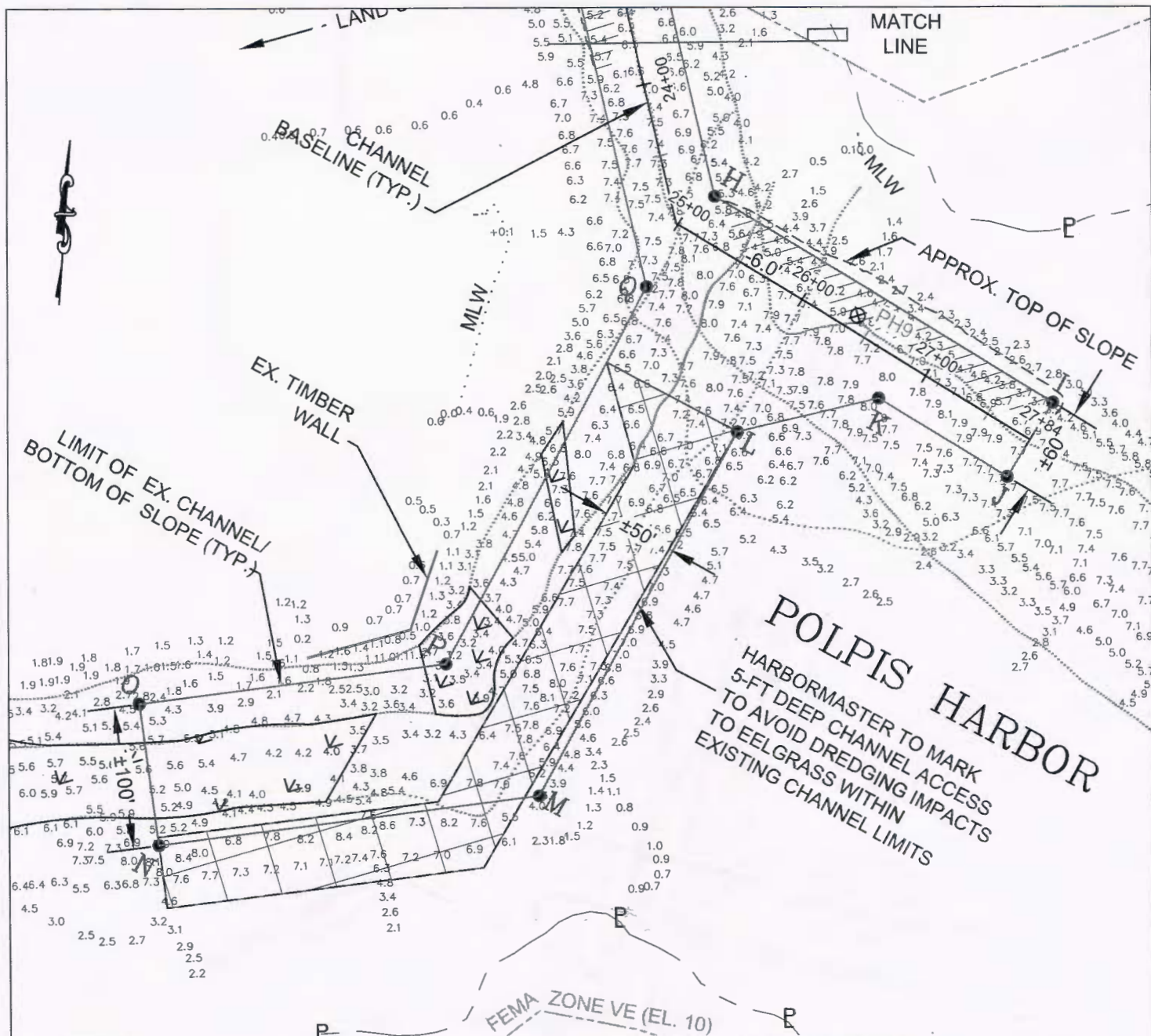


POLPIS HARBOR ENTRANCE CHANNEL MAINTENANCE DREDGING PROJECT
NANTUCKET, MASSACHUSETTS

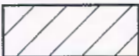
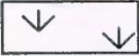


AT: POLPIS HARBOR/NANTUCKET HARBOR
COUNTY OF: NANTUCKET
APPLICATION BY: TOWN OF NANTUCKET

DATE: APRIL 1, 2016

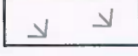

SHEET 5 OF 11



LEGEND:

- MLW = EL. 0.0'
- MHW = EL. +3.04'
- AHLT = EL. +4.10'
-  PROPOSED MAINTENANCE DREDGING TO EL. -6.0' MLW
-  EELGRASS (SEE GENERAL NOTE 10)
-  EELGRASS VERIFIED BY U/W CAMERA (10/3/13)
-  EELGRASS SURVEY TRANSECT (10/3/13)

LEGEND (CONTINUED):

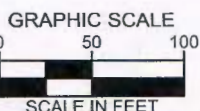
-  EELGRASS (MA GIS 1995 & 2001)
-  PROP. AREA OF RE-ALIGNED CHANNEL (NO DREDGING PROPOSED)
- HISTORIC MEAN HIGH WATER (HMHW)
- FEMA LINE
- EX./PROP. CHANNEL LIMIT/BOT. OF SLOPE
- PROP. TOP OF SLOPE

PURPOSE: PROPOSED POLPIS HARBOR ENTRANCE CHANNEL MAINTENANCE DREDGING TO IMPROVE NAVIGATION AND TIDAL FLUSHING

DATUM:
MLW = 0.0
MHW = +3.04'
AHLT = +4.10'

CLE ENGINEERING, INC.
15 CREEK ROAD, MARION MA, 02738

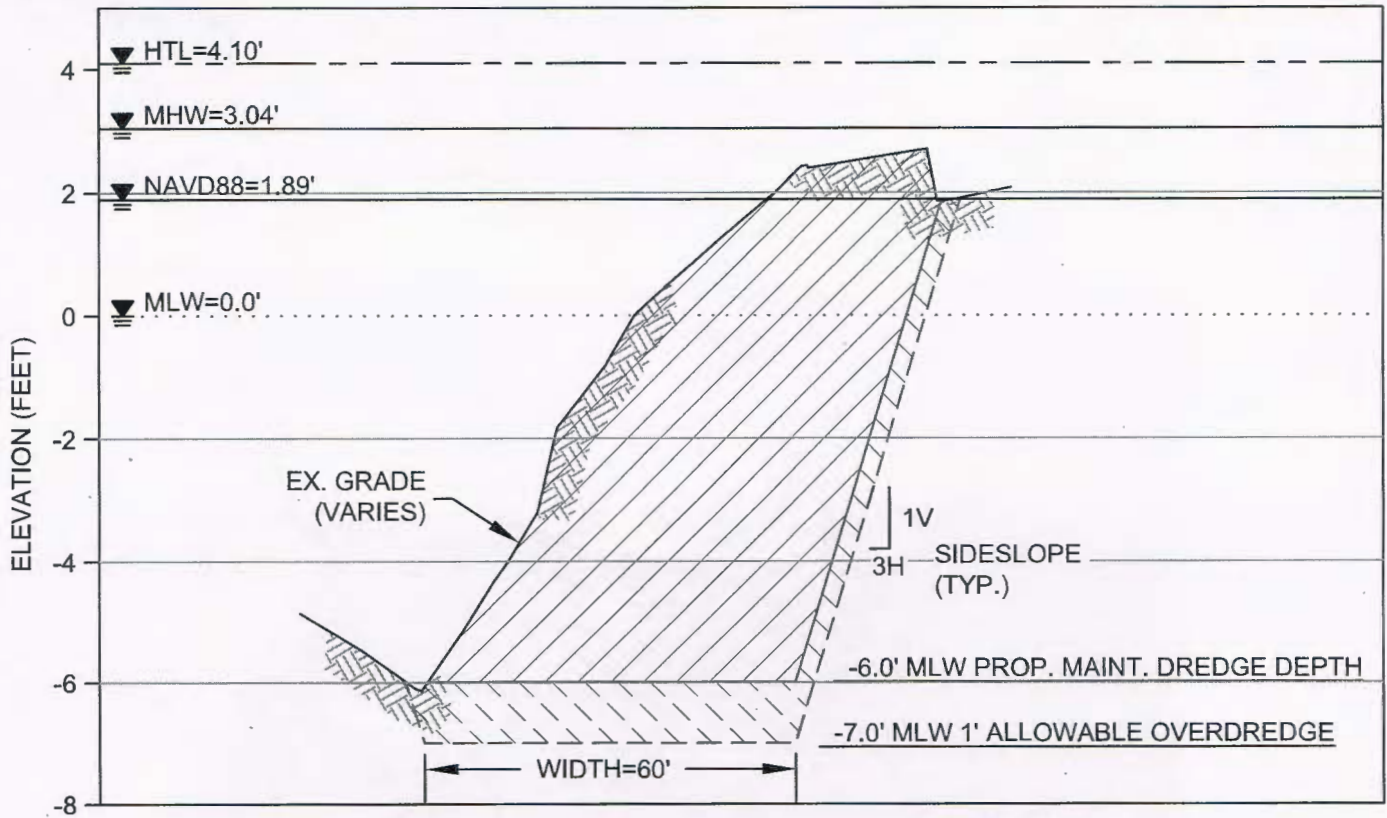
SITE PLAN



POLPIS HARBOR ENTRANCE CHANNEL MAINTENANCE DREDGING PROJECT
NANTUCKET, MASSACHUSETTS
AT: POLPIS HARBOR/NANTUCKET HARBOR
COUNTY OF: NANTUCKET
APPLICATION BY: TOWN OF NANTUCKET

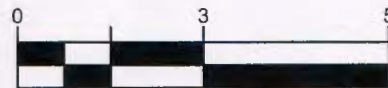
DATE: APRIL 1, 2016, REV. 8/8/16

SHEET 6 OF 11



STA. 7+00
TYPICAL DREDGE SECTION 1-1
HORIZONTAL SCALE 1"=30'
VERTICAL SCALE 1"=3'

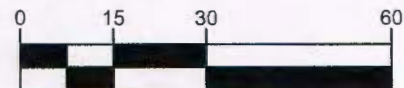
GRAPHIC SCALE



(IN FEET)

1 INCH = 3 FEET

GRAPHIC SCALE



(IN FEET)

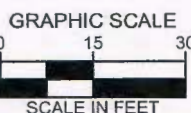
1 INCH = 30 FEET

PURPOSE: PROPOSED POLPIS HARBOR ENTRANCE
CHANNEL MAINTENANCE DREDGING TO IMPROVE
NAVIGATION AND TIDAL FLUSHING

DATUM:
MLW = 0.0
MHW = +3.04'
AHTL = +4.10'

CLE ENGINEERING, INC.
15 CREEK ROAD, MARION MA, 02738

TYPICAL CROSS SECTION

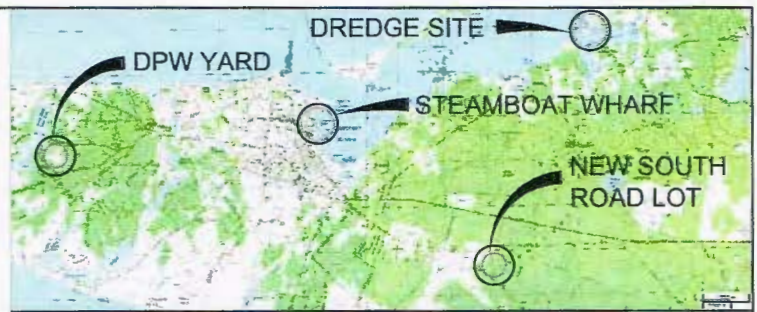


POLPIS HARBOR ENTRANCE CHANNEL MAINTENANCE
DREDGING PROJECT
NANTUCKET, MASSACHUSETTS

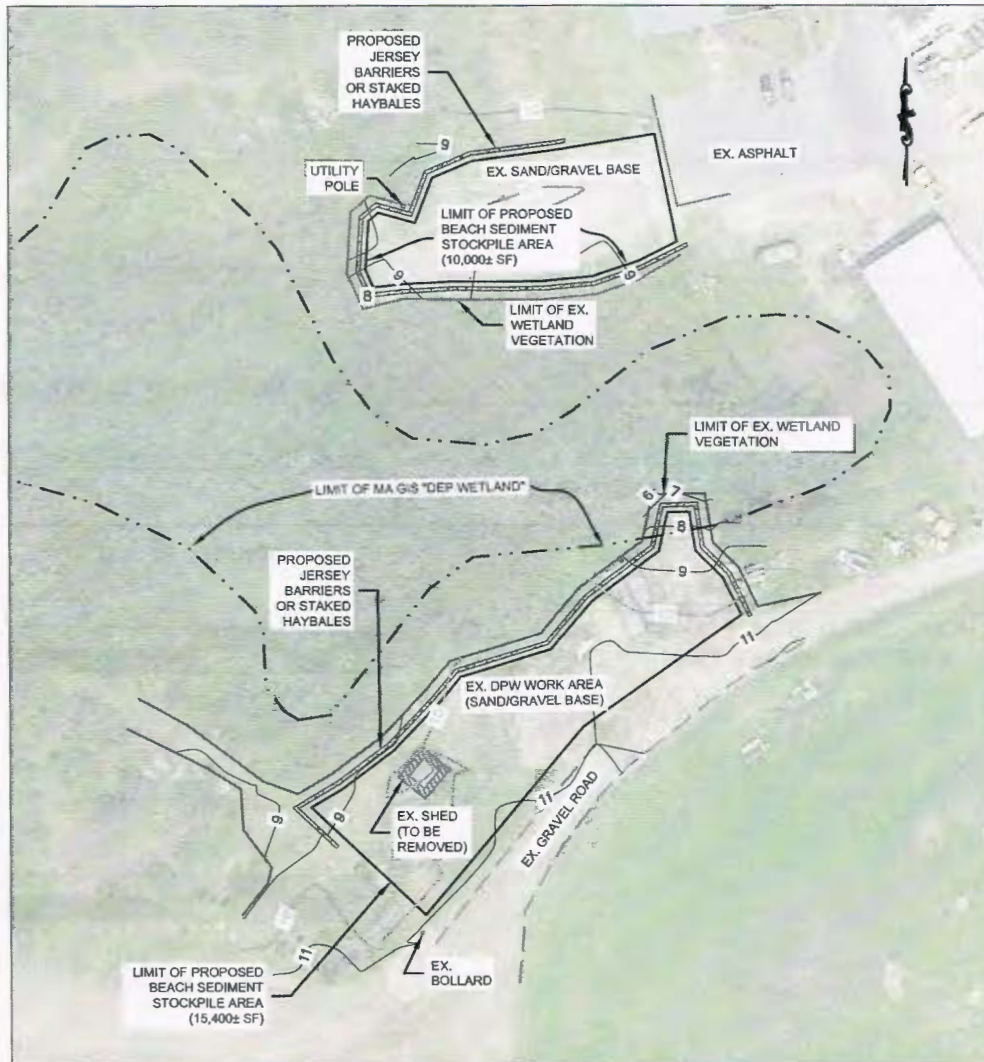
AT: POLPIS HARBOR/NANTUCKET HARBOR
COUNTY OF: NANTUCKET
APPLICATION BY: TOWN OF NANTUCKET

DATE: APRIL 1, 2016

SHEET 7 OF 11



STOCKPILE AREA LOCUS MAP 1"=13,000 FT



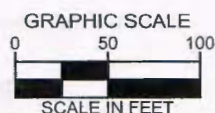
STOCKPILE AREA
DPW YARD (188 MADAKET ROAD)
SCALE: 1"=100'

PURPOSE: PROPOSED POLPIS HARBOR ENTRANCE
CHANNEL MAINTENANCE DREDGING TO IMPROVE
NAVIGATION AND TIDAL FLUSHING

DATUM:
MLW = 0.0
MHW = +3.04'
AHTL = +4.10'

CLE ENGINEERING, INC.
15 CREEK ROAD, MARION MA, 02738

DREDGE SEDIMENT STOCKPILE PLAN

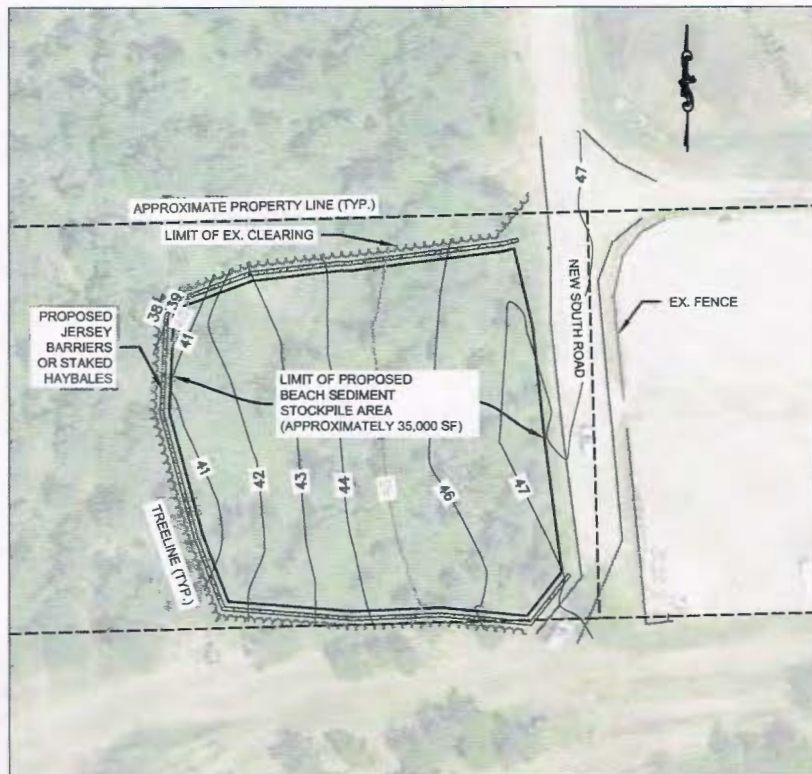


POLPIS HARBOR ENTRANCE CHANNEL MAINTENANCE
DREDGING PROJECT
NANTUCKET, MASSACHUSETTS

AT: POLPIS HARBOR/NANTUCKET HARBOR
COUNTY OF: NANTUCKET
APPLICATION BY: TOWN OF NANTUCKET

DATE: APRIL 1, 2016

SHEET 8 OF 11



STOCKPILE AREA
VACANT LOT (NEW SOUTH ROAD)
 SCALE: 1"=100'

STOCKPILE AREA NOTES:

1. VERTICAL DATUM: NAVD88
2. RESULTS OF TOPOGRAPHY FROM CLE ENGINEERING, INC. (CLE) SURVEY DATED 2/4/16.
3. LIMITS OF WETLAND VEGETATION AS SHOWN WERE FIELD VERIFIED ON 2/4/16. LIMITS OF DEP WETLANDS (SHRUB SWAMP) ARE BASED UPON AVAILABLE MA GIS INFORMATION.
4. PROJECT BENCHMARK IS DISK 8449130 H EL. 5.78' MLLW (3.69' NAVD88) LOCATED AT THE CHILDRENS BEACH BOAT RAMP IN NANTUCKET, MA.
5. COORDINATES ARE BASED ON NAD 83 STATE PLANE MASSACHUSETTS ISLAND.
6. PROPERTY LINES SHOWN ARE APPROXIMATE. INFORMATION OBTAINED FROM NANTUCKET GIS DATABASE.
7. DPW YARD STOCKPILE AREA IS LOCATED IN FEMA ZONE X AS SHOWN ON MAP 25019C066G DATED JUNE 9, 2014.
8. NEW SOUTH ROAD VACANT LOT STOCKPILE AREA IS LOCATED IN FEMA ZONE X AS SHOWN ON MAP 25019C0093G DATED JUNE 9, 2014.
9. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES SHOWN, AND CAN ONLY BE CONSIDERED AS INDICATING THE CONDITIONS AT THAT TIME.
10. POSSESSION AND USE OF THE MATERIAL CONTAINED ON THESE DRAWINGS IS GRANTED ONLY IN CONNECTION WITH ITS USE AS IT RELATES TO THE TITLED PROJECT. ANY OTHER USE, REPRODUCTION OR DISCLOSURE OF THE INFORMATION CONTAINED HEREON IS EXPRESSLY PROHIBITED WITHOUT THE WRITTEN CONSENT OF CLE ENGINEERING INC.

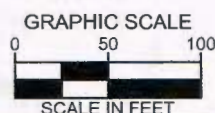
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PURPOSE: PROPOSED POLPIS HARBOR ENTRANCE CHANNEL MAINTENANCE DREDGING TO IMPROVE NAVIGATION AND TIDAL FLUSHING

DATUM:
 MLW = 0.0
 MHW = +3.04'
 AHTL = +4.10'

CLE ENGINEERING, INC.
 15 CREEK ROAD, MARION MA, 02738

**DREDGE SEDIMENT
 STOCKPILE PLAN &
 NOTES**



POLPIS HARBOR ENTRANCE CHANNEL MAINTENANCE
 DREDGING PROJECT
 NANTUCKET, MASSACHUSETTS

AT: POLPIS HARBOR/NANTUCKET HARBOR
 COUNTY OF: NANTUCKET
 APPLICATION BY: TOWN OF NANTUCKET

DATE: APRIL 1, 2016

SHEET 9 OF 11

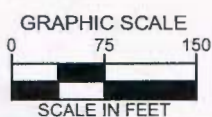


PURPOSE: PROPOSED POLPIS HARBOR ENTRANCE CHANNEL MAINTENANCE DREDGING PROJECT TO IMPROVE NAVIGATION AND TIDAL FLUSHING

DATUM:
MLW = 0.0
MHW = +3.04'
AHTL = +4.10'

CLE ENGINEERING, INC.
15 CREEK ROAD, MARION MA, 02738

SITE PLAN: ACCESS ROAD



POLPIS HARBOR ENTRANCE CHANNEL MAINTENANCE DREDGING PROJECT
NANTUCKET, MASSACHUSETTS

AT: POLPIS HARBOR/NANTUCKET HARBOR
COUNTY OF: NANTUCKET
APPLICATION BY: TOWN OF NANTUCKET

DATE: APRIL 1, 2016

SHEET 10 OF 11

GENERAL NOTES:

1. VERTICAL DATUM: MEAN LOW WATER (MLW) = 0.0'; NAVD88 = 1.89'; MEAN HIGH WATER (MHW) = 3.04'; ANNUAL HIGH TIDE LINE (AHTL) = 4.10'.
2. RESULTS OF HYDROGRAPHY FROM CLE ENGINEERING, INC. (CLE) SURVEY DATED 10/2/13, 10/3/13 & 10/22/13. SOUNDINGS ARE IN FEET AND TENTHS, AND REFER TO DEPTHS BELOW MLW. RESULTS OF TOPOGRAPHIC SURVEY FROM SURVEY DATED 10/22/13.
3. SEDIMENT SAMPLES COLLECTED BY TG+B MARINE SERVICES, INC. ON 5/8/14.
4. ALL DREDGE SEDIMENTS TO BE BENEFICIALLY RE-USED FOR PERMITTED COMPATIBLE BEACH NOURISHMENT SITES ACROSS THE ISLAND. DREDGE SEDIMENTS WILL BE DEWATERED, UNLOADED INTO DUMP TRUCKS AT THE STEAMSHIP AUTHORITY DOCK, AND TRANSFERRED TO A STOCKPILE AREA LOCATED AT THE TOWN OF NANTUCKET DEPARTMENT OF PUBLIC WORKS YARD AT 188 MADAKET ROAD, NANTUCKET, MA.
5. LIMITS OF FRESH WATER WETLANDS, AS SHOWN, HAVE NOT BEEN DELINEATED. LIMITS ARE APPROXIMATE AND BASED UPON AVAILABLE MAGIS INFORMATION AND OBSERVED FIELD CONDITIONS.
6. PROJECT BENCHMARK IS DISK 9130 K 1981 LOCATED AT THE BRANDT POINT USCG STATION IN NANTUCKET, MA. SITE BENCHMARK IS HUB SET ON BEACH AT ENTRANCE TO POLPIS HARBOR AT EL. +3.91' MLW.
7. COORDINATES ARE BASED ON NAD 83 STATE PLANE MASSACHUSETTS ISLAND.
8. CHANNEL LIMITS SCALED IN BY CLE BASED UPON EXISTING PROJECT PLAN TITLED "PROPOSED HARBOR MAINTENANCE DREDGING AND BEACH NOURISHMENT, POLPIS HARBOR NANTUCKET, MA" MA DEM CONTRACT NO 3253.
9. CHANNEL MARKERS AND EX. TIMBER CHANNEL WALL LOCATION LOCATED IN THE FIELD WITH DGPS DURING TIME OF HYDROGRAPHIC SURVEY.
10. LIMITS OF EELGRASS INTERPOLATED BASED UPON TRANSECT LINES SURVEYED BY CLE ON DATES 10/2/13, 10/3/13, 10/22/13 & 10/23/13.
11. LAND CONTAINING SHELLFISH AREAS, AS SHOWN, ARE BASED UPON THE MOST CURRENT AVAILABLE MA GIS DATA OF WHICH REPRESENTS "POTENTIALLY SUITABLE HABITAT," AS IDENTIFIED BY MA DIV. OF MARINE FISHERIES. NO SHELLFISH SURVEY HAS BEEN PERFORMED TO CONFIRM PRESENCE OF ACTUAL HABITAT.
12. LIMITS OF EXISTING REMNANT DEGRADED/OVERWAHSED SALT MARSH, AS SHOWN, ARE APPROXIMATE AND REFLECT BOTH FIELD SURVEY & VISUAL OBSERVATIONS MADE BY CLE ON 10/12/13 & 5/8/14 RESPECTIVELY.
13. PROPERTY LINE INFORMATION FROM MA GIS DATABASE.
14. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES SHOWN, AND CAN ONLY BE CONSIDERED AS INDICATING THE CONDITIONS AT THAT TIME. INTERPOLATED INFORMATION FROM BETWEEN SOUNDING RUNS IS NOT GUARANTEED. SHOALS, OBSTRUCTIONS OR OTHER DIFFERING CONDITIONS MAY EXIST BETWEEN THESE RUNS. CONSULT WITH CLE ENGINEERING FOR MORE DETAILED INFORMATION.
15. POSSESSION AND USE OF THE MATERIAL CONTAINED ON THESE DRAWINGS IS GRANTED ONLY IN CONNECTION WITH ITS USE AS IT RELATES TO THE TITLED PROJECT. ANY OTHER USE, REPRODUCTION OR DISCLOSURE OF THE INFORMATION CONTAINED HEREON IS EXPRESSLY PROHIBITED WITHOUT THE WRITTEN CONSENT OF CLE ENGINEERING INC.

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DREDGE NOTES:

1. ALL PROPOSED MAINTENANCE DREDGING SHALL BE TO A DEPTH OF -6.0' MLW WITH A 1-FT ALLOWABLE OVERDREDGE TO A DEPTH OF -7.0' MLW.
2. PROPOSED LIMITS OF DREDGING ARE CONSISTENT WITHIN THOSE LAST AUTHORIZED UNDER THE FOLLOWING REGULATORY APPROVALS:
 - MEPA ENF/SECRETARY CERT. EEA NO. 8868, ISSUED 12/5/1991.
 - MA DEP CHAPTER 91 PERMIT #229, ISSUED 7/2/1992.
 - ORDER OF CONDITIONS MA DEP FILE #SE 48-699, ISSUED 2/21/1992.
 - MA DEP WQ CERT TRANS# 21929, ISSUED 5/29/1992; REV. 3/8/1993.
 - U.S. ARMY CORPS OF ENGINEERS PERMIT #1991-02370, ISSUED 6/1/1992.
3. TOTAL ESTIMATED DREDGE VOLUME = ±8,300 CY (INCLUDES 1' ALLOWABLE OVERDREDGE & 3H:1V SIDESLOPES).
TOTAL ESTIMATED DREDGE AREA = ±69,039 SF (INCLUDES 3H:1V SIDESLOPES).

SURVEY NOTES:

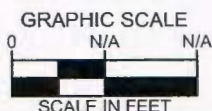
PROJECT NAME: POLPIS HARBOR
PROJECT NUMBER: 12118
PLOT SCALE: 1"=100'
SURVEY DATE: 10/2/13, 10/3/13, 10/22/13
SURVEYOR: M.COUNT, J. GUARD
VESSEL: CLE LOWE
TRANS./FATH.: 200KHZ, NARROW BEAM, ODOM MKII,
WEATHER COND: MOSTLY SUNNY, WIND LIGHT WSW, SEAS CALM
PROJECT DATUM: MLW
COORD. SYSTEM: NAD-83, MASS ISLAND
DATA REDUCTION: SOUNDING DATA SORTED W/HYPACK, 1' RADIUS
TIDAL DATA: SCREW SET AT EL. +3.21' MLW ON TIMBER CHANNEL WALL TO SET TIDEBOARD
BENCHMARK: PROJECT BENCHMARK IS DISK 9130 K 1981 AT USCG STATION BRANDT POINT,
NANTUCKET EL. +4.84' MLW. SITE BENCHMARK IS HUB SET ON BEACH EL. +3.91' MLW

PURPOSE: PROPOSED POLPIS HARBOR ENTRANCE
CHANNEL MAINTENANCE DREDGING TO IMPROVE
NAVIGATION AND TIDAL FLUSHING

DATUM:
MLW = 0.0
MHW = +3.04'
AHTL = +4.10'

CLE ENGINEERING, INC.
15 CREEK ROAD, MARION MA, 02738

NOTES



POLPIS HARBOR ENTRANCE CHANNEL MAINTENANCE
DREDGING PROJECT
NANTUCKET, MASSACHUSETTS

AT: POLPIS HARBOR/NANTUCKET HARBOR
COUNTY OF: NANTUCKET
APPLICATION BY: TOWN OF NANTUCKET

DATE: APRIL 1, 2016

SHEET 11 OF 11



**US Army Corps
of Engineers®**
New England District

**GENERAL PERMIT
WORK-START NOTIFICATION FORM**
(Minimum Notice: Two weeks before work begins)

* MAIL TO: U.S. Army Corps of Engineers, New England District *
* Permits and Enforcement Branch *
* Regulatory Division *
* 696 Virginia Road *
* Concord, Massachusetts 01742-2751 *

Corps of Engineers Permit No. NAE-2014-01550 was issued to Town of Nantucket, Massachusetts, on September 9, 2016. This work is located in Polpis Harbor at Nantucket, Massachusetts. The permit authorized the permittee to annually maintenance dredge up to 1.58 acres of the entrance channel to -6' MLW, plus 1' allowable overdredge, for up to 8,300 CY of sandy sediment.

The people (e.g., contractor) listed below will do the work, and they understand the permit's conditions and limitations.

PLEASE PRINT OR TYPE

Name of Person/Firm: _____

Business Address: _____

Telephone Numbers: () _____ () _____

Proposed Work Dates: **Start:** _____ **Finish:** _____

Permittee/Agent Signature: _____ **Date:** _____

Printed Name: _____ **Title:** _____

Date Permit Issued: _____ **Date Permit Expires:** _____

FOR USE BY THE CORPS OF ENGINEERS

PM: Phillip Nimeskern **Submittals Required:** _____

Inspection Recommendation: _____

ATTACHMENT C

DREDGE SEDIMENT GRAIN SIZE DATA



Briggs Engineering & Testing

A DIVISION OF PK ASSOCIATES, INC.

CLE Engineering
15 Creek Road
Marion, MA 02738
ATTN: Mr. Trevor Doolan

Report Date: 6/12/14

Project: **Polpis Harbor Maint. Dredging**
Briggs #: 25284

Tested: 6/10/14
Received: 6/3/14

1.	<u>Sample No.</u> M-24376	<u>Description</u> Sand	<u>Source of Material</u> PH-1
----	------------------------------	----------------------------	-----------------------------------

2. Sieve Analysis {ASTM C 136, and ASTM C 117}

Sieve Size		Results	Specifications
Standard	Alternate	{% Passing by Wt.}	
100 mm	4"	100	
90 mm	3-1/2"	100	
75 mm	3"	100	
63 mm	2-1/2"	100	
50 mm	2"	100	
37.5 mm	1-1/2"	100	
25 mm	1"	100	
19 mm	3/4"	100	
12.5 mm	1/2"	100	
9.5 mm	3/8"	100	
4.75 mm	#4	99	
2.36 mm	#10	96	
1.18 mm	#20	74	
0.600 mm	#40	27	
0.300 mm	#80	2	
0.150 mm	#100	1	
0.075 mm	#200	0.9	

BRIGGS ENGINEERING & TESTING
A Division of PK Associates, Inc.

Sean Skorohod
Director of Testing Services
Construction Technology Division

www.briggsengineering.com

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Rockland, MA 02370
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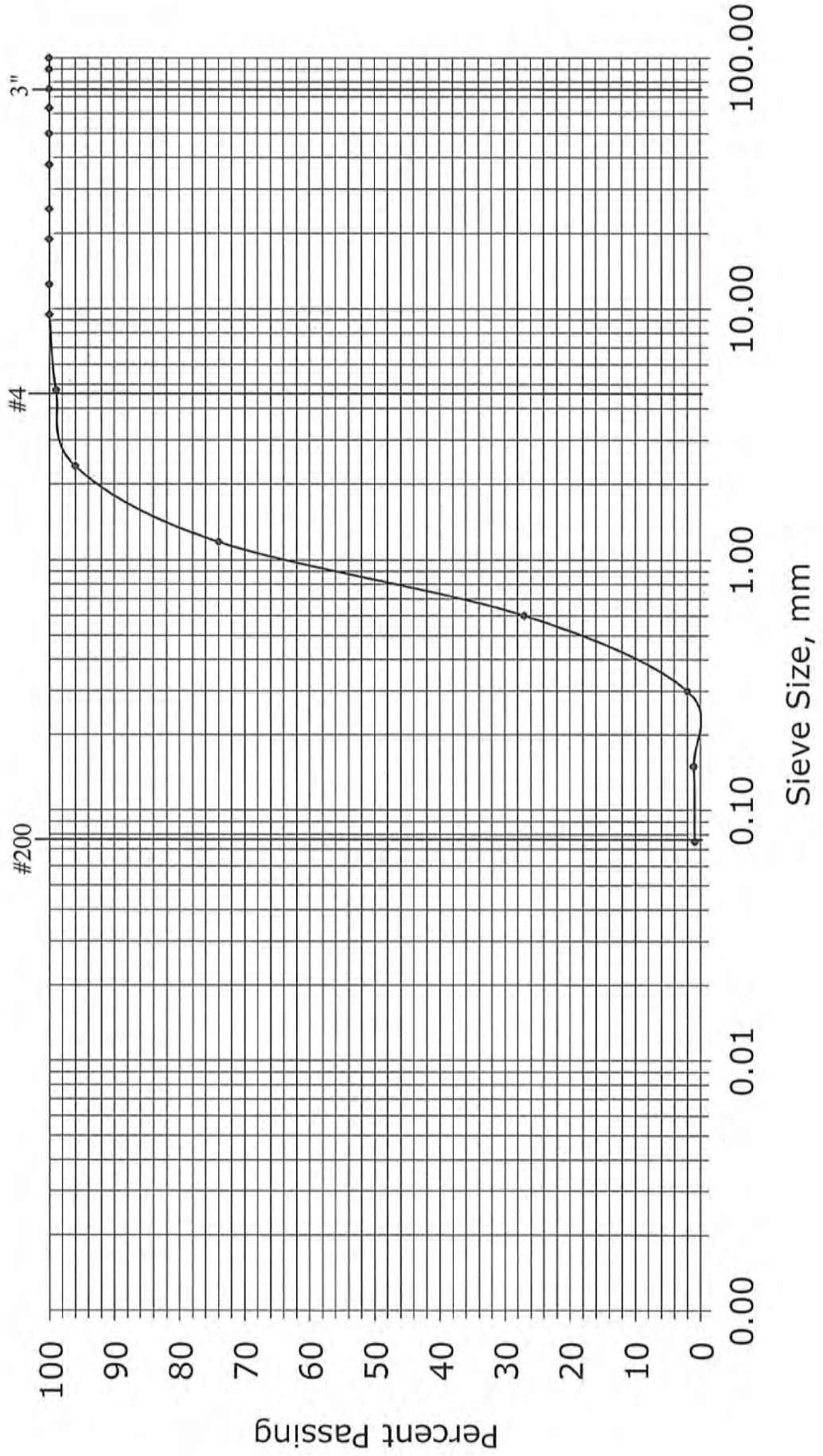
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Project:	Polpis Harbor Maint. Dredging
Date Tested:	6/10/14
Lab Ref. No.:	M-24376

Sieve Analysis





Briggs Engineering & Testing

A DIVISION OF PK ASSOCIATES, INC.

CLE Engineering
15 Creek Road
Marion, MA 02738
ATTN: Mr. Trevor Doolan

Report Date: 6/12/14

Project: **Polpis Harbor Maint. Dredging**
Briggs #: 25284

Tested: 6/10/14
Received: 6/3/14

1.	<u>Sample No.</u>	<u>Description</u>	<u>Source of Material</u>
	M-24377	Sand	PH-2

2. Sieve Analysis {ASTM C 136, and ASTM C 117}

<u>Sieve Size</u>		<u>Results</u>	<u>Specifications</u>
<u>Standard</u>	<u>Alternate</u>	<u>{% Passing by Wt.}</u>	
100 mm	4"	100	
90 mm	3-1/2"	100	
75 mm	3"	100	
63 mm	2-1/2"	100	
50 mm	2"	100	
37.5 mm	1-1/2"	100	
25 mm	1"	100	
19 mm	3/4"	100	
12.5 mm	1/2"	100	
9.5 mm	3/8"	100	
4.75 mm	#4	94	
2.36 mm	#10	87	
1.18 mm	#20	63	
0.600 mm	#40	27	
0.300 mm	#80	9	
0.150 mm	#100	5	
0.075 mm	#200	1.3	

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Sean Skorohod
Director of Testing Services
Construction Technology Division

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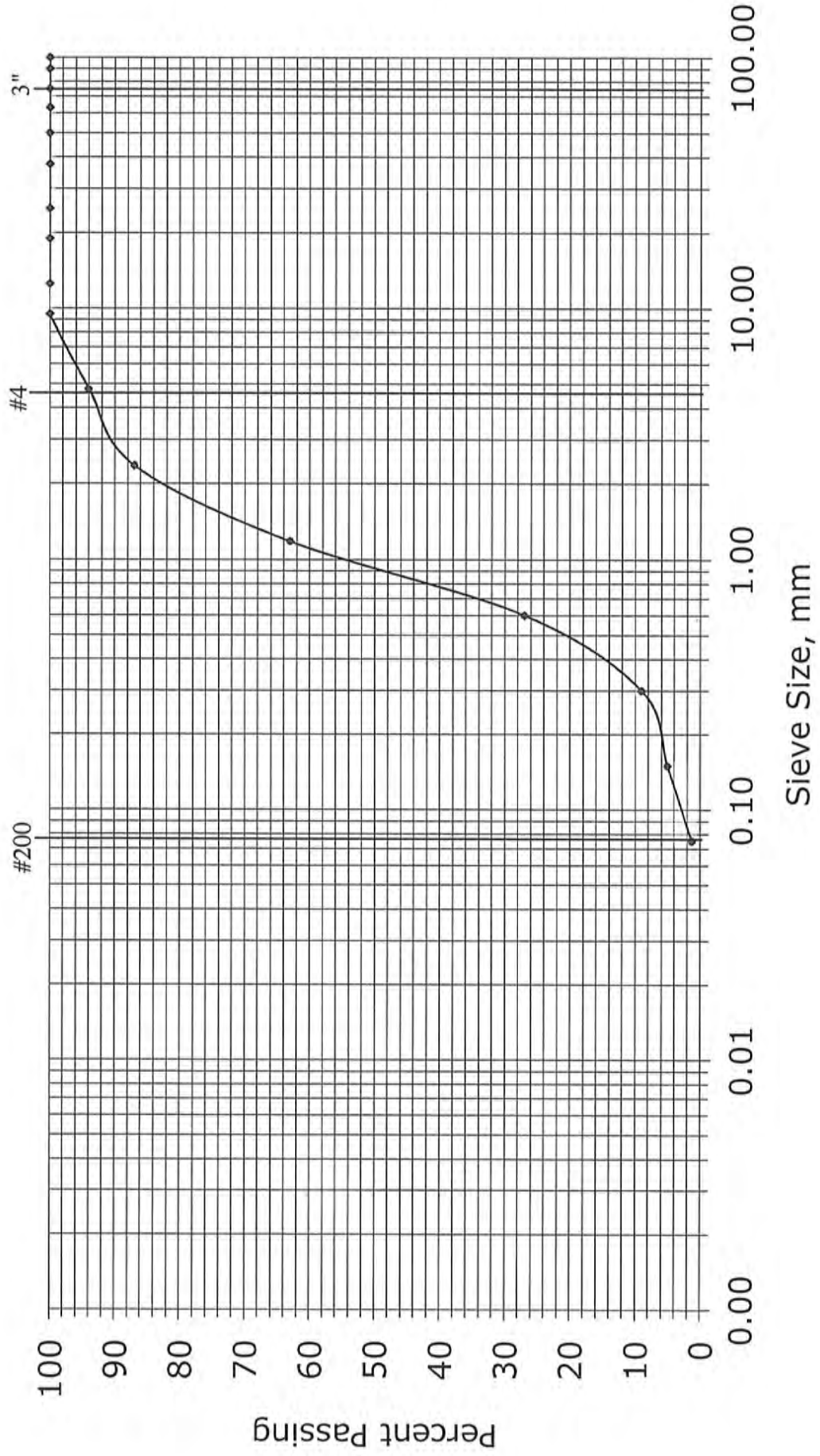
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Briggs Engineering & Testing
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Project:	Polpis Harbor Maint. Dredging
Date Tested:	6/10/14
Lab Ref. No.:	M-24377

Sieve Analysis





Briggs Engineering & Testing

A DIVISION OF PK ASSOCIATES, INC.

CLE Engineering
15 Creek Road
Marion, MA 02738
ATTN: Mr. Trevor Doolan

Report Date: 6/12/14

Project: **Polpis Harbor Maint. Dredging**
Briggs #: 25284

Tested: 6/10/14
Received: 6/3/14

1.	<u>Sample No.</u>	<u>Description</u>	<u>Source of Material</u>
	M-24378	Sand	PH-3

2. Sieve Analysis {ASTM C 136, and ASTM C 117}

<u>Sieve Size</u>		<u>Results</u>	<u>Specifications</u>
<u>Standard</u>	<u>Alternate</u>	<u>{% Passing by Wt.}</u>	
100 mm	4"	100	
90 mm	3-1/2"	100	
75 mm	3"	100	
63 mm	2-1/2"	100	
50 mm	2"	100	
37.5 mm	1-1/2"	100	
25 mm	1"	100	
19 mm	3/4"	100	
12.5 mm	1/2"	100	
9.5 mm	3/8"	100	
4.75 mm	#4	96	
2.36 mm	#10	91	
1.18 mm	#20	64	
0.600 mm	#40	13	
0.300 mm	#80	1	
0.150 mm	#100	1	
0.075 mm	#200	0.7	

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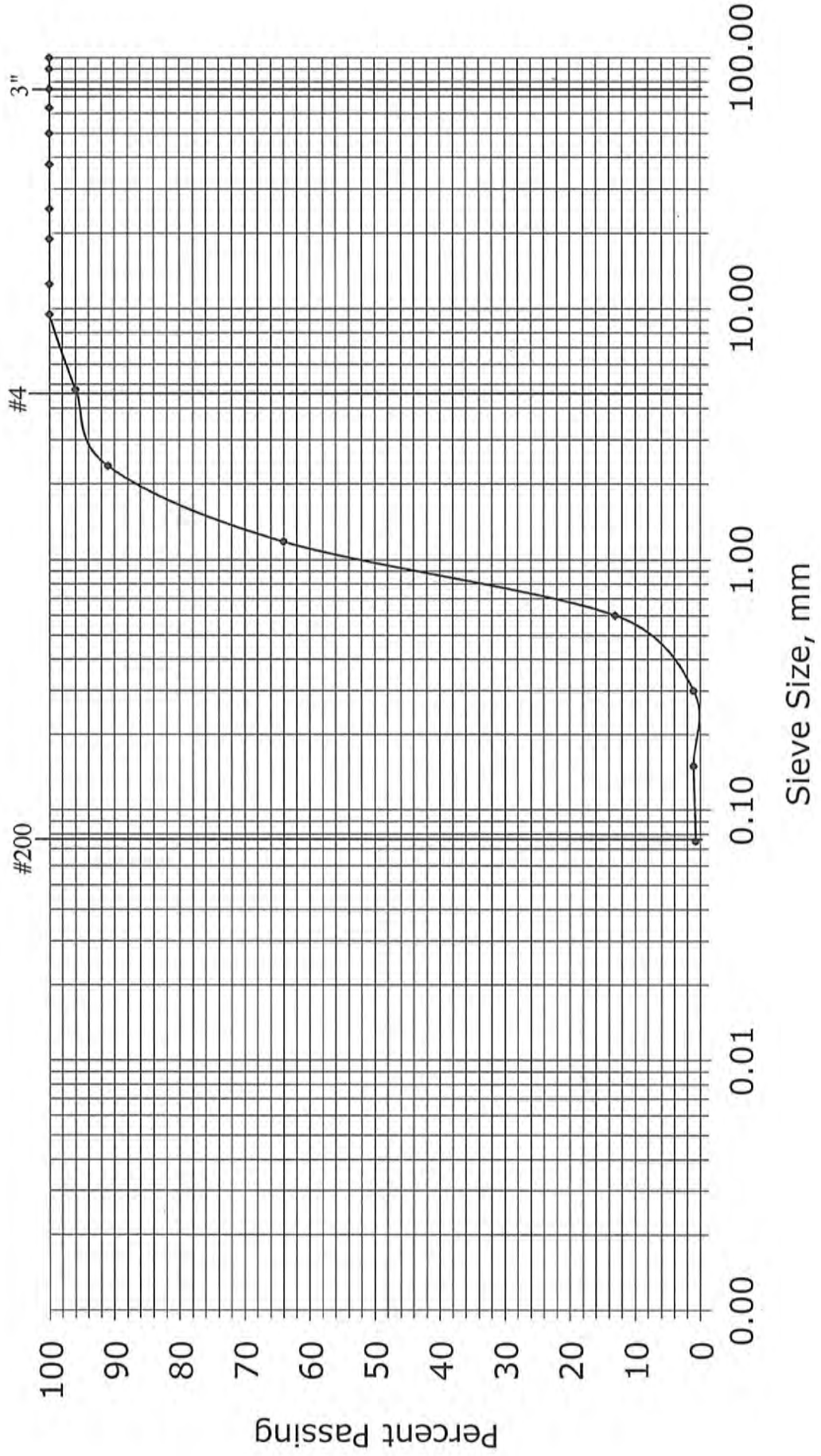
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Project:	Polpis Harbor Maint. Dredging
Date Tested:	6/10/14
Lab Ref. No.:	M-24378

Sieve Analysis





Briggs Engineering & Testing

A DIVISION OF PK ASSOCIATES, INC.

CLE Engineering
15 Creek Road
Marion, MA 02738
ATTN: Mr. Trevor Doolan

Report Date: 6/12/14

Project: **Polpis Harbor Maint. Dredging**
Briggs #: 25284

Tested: 6/10/14
Received: 6/3/14

1.	<u>Sample No.</u>	<u>Description</u>	<u>Source of Material</u>
	M-24379	Sand	PH-4

2. Sieve Analysis {ASTM C 136, and ASTM C 117}

<u>Sieve Size</u>		<u>Results</u>	<u>Specifications</u>
<u>Standard</u>	<u>Alternate</u>	<u>{% Passing by Wt.}</u>	
100 mm	4"	100	
90 mm	3-1/2"	100	
75 mm	3"	100	
63 mm	2-1/2"	100	
50 mm	2"	100	
37.5 mm	1-1/2"	100	
25 mm	1"	100	
19 mm	3/4"	100	
12.5 mm	1/2"	100	
9.5 mm	3/8"	100	
4.75 mm	#4	99	
2.36 mm	#10	97	
1.18 mm	#20	72	
0.600 mm	#40	18	
0.300 mm	#80	1	
0.150 mm	#100	1	
0.075 mm	#200	0.7	

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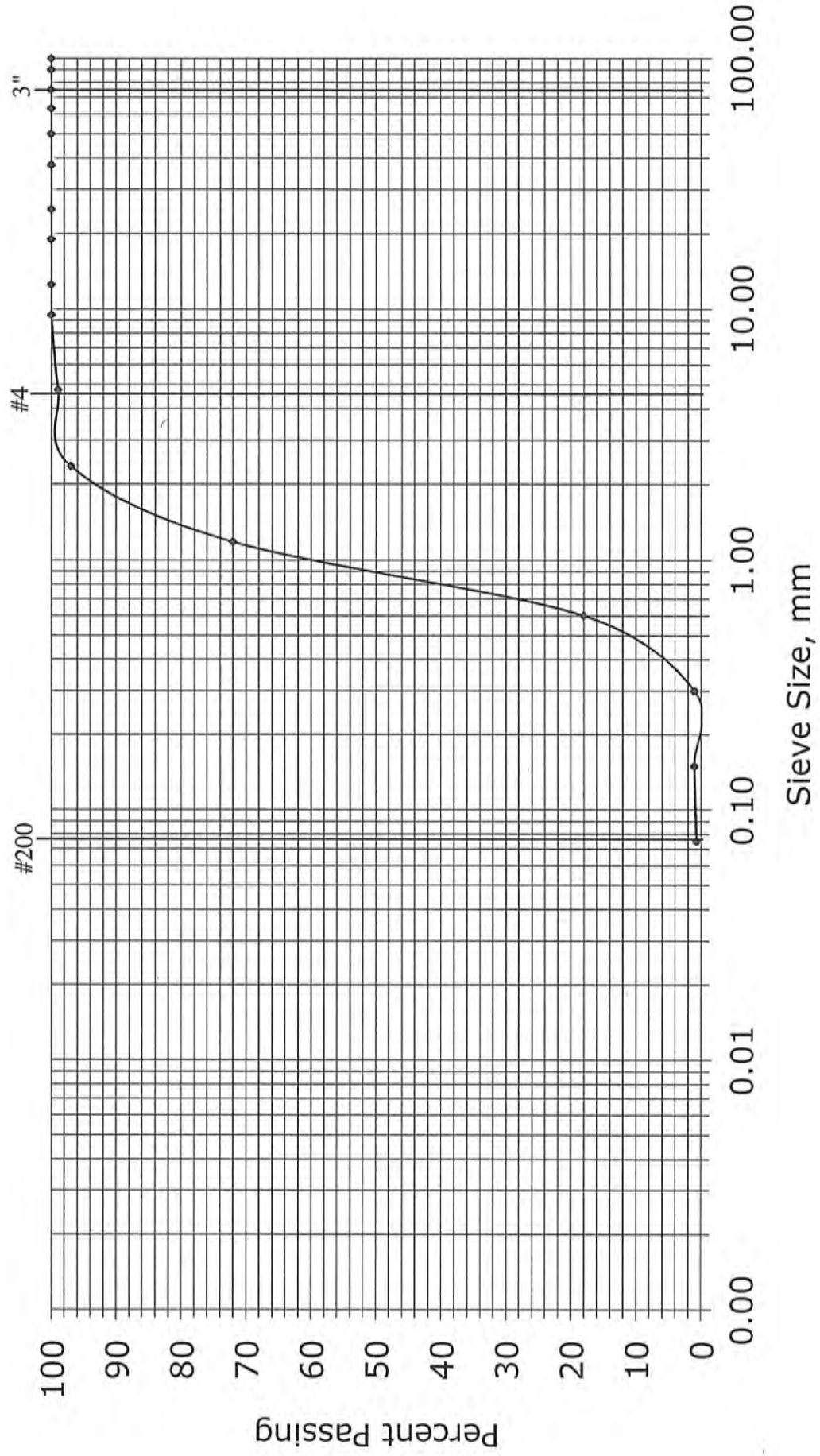
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Project:	Polpis Harbor Maint. Dredging
Date Tested:	6/10/14
Lab Ref. No.:	M-24379

Sieve Analysis





Briggs Engineering & Testing

A DIVISION OF PK ASSOCIATES, INC.

CLE Engineering
15 Creek Road
Marion, MA 02738
ATTN: Mr. Trevor Doolan

Report Date: 6/12/14

Project: **Polpis Harbor Maint. Dredging**
Briggs #: 25284

Tested: 6/10/14
Received: 6/3/14

1.	<u>Sample No.</u>	<u>Description</u>	<u>Source of Material</u>
	M-24380	Sand	PH-5

2. Sieve Analysis {ASTM C 136, and ASTM C 117}

<u>Sieve Size</u>		<u>Results</u>	<u>Specifications</u>
<u>Standard</u>	<u>Alternate</u>	<u>{% Passing by Wt.}</u>	
100 mm	4"	100	
90 mm	3-1/2"	100	
75 mm	3"	100	
63 mm	2-1/2"	100	
50 mm	2"	100	
37.5 mm	1-1/2"	100	
25 mm	1"	99	
19 mm	3/4"	97	
12.5 mm	1/2"	93	
9.5 mm	3/8"	91	
4.75 mm	#4	86	
2.36 mm	#10	80	
1.18 mm	#20	56	
0.600 mm	#40	21	
0.300 mm	#80	3	
0.150 mm	#100	2	
0.075 mm	#200	1.0	

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Phone (617) 666-6040

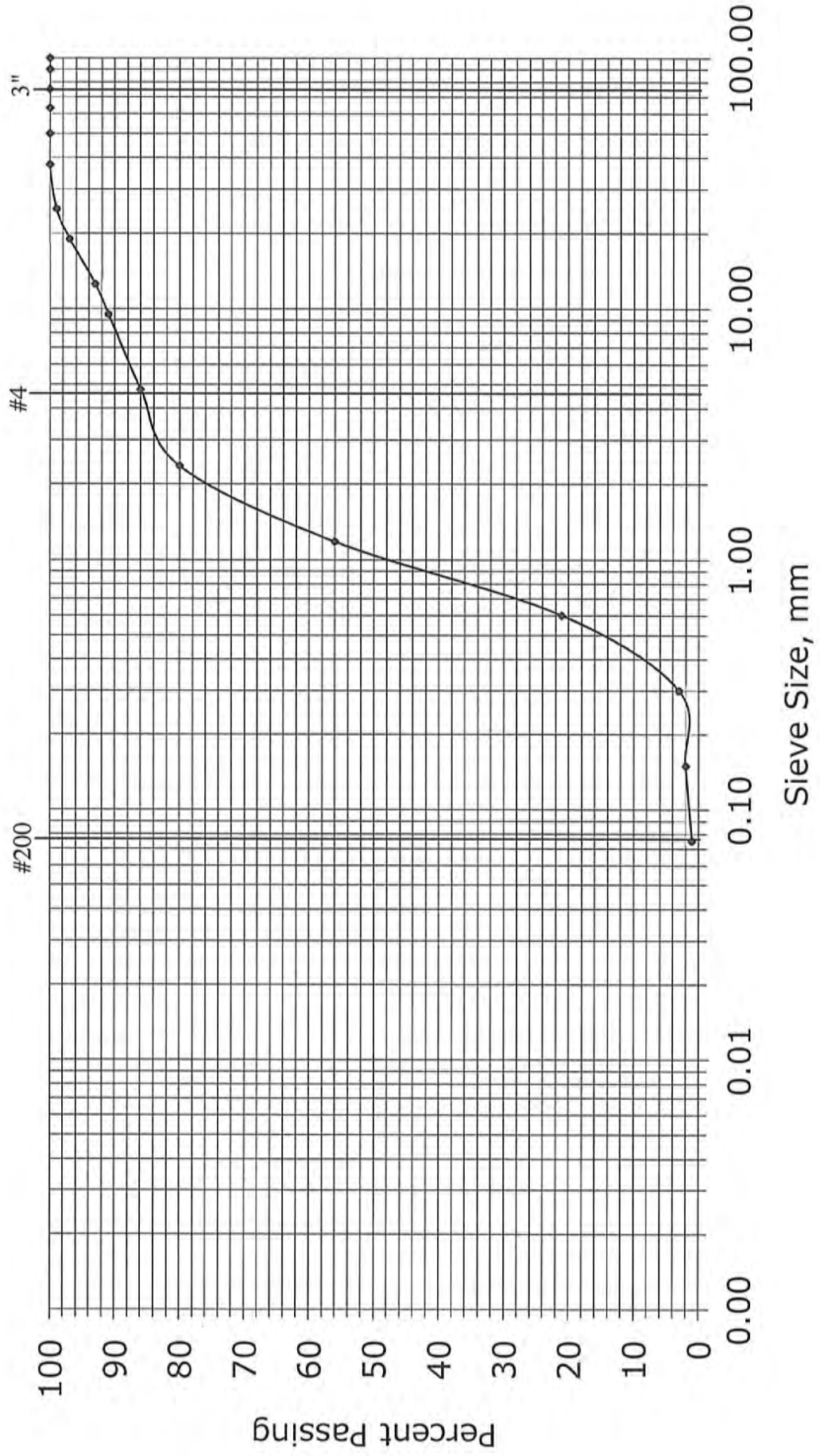
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Project:	Polpis Harbor Maint. Dredging
Date Tested:	6/10/14
Lab Ref. No.:	M-24380

Sieve Analysis





Briggs Engineering & Testing

A DIVISION OF PK ASSOCIATES, INC.

CLE Engineering
15 Creek Road
Marion, MA 02738
ATTN: Mr. Trevor Doolan

Report Date: 6/12/14

Project: **Polpis Harbor Maint. Dredging**
Briggs #: 25284

Tested: 6/10/14
Received: 6/3/14

1.	<u>Sample No.</u>	<u>Description</u>	<u>Source of Material</u>
	M-24381	Sand	PH-6

2. Sieve Analysis {ASTM C 136, and ASTM C 117}

<u>Sieve Size</u>		<u>Results</u>	<u>Specifications</u>
<u>Standard</u>	<u>Alternate</u>	<u>{% Passing by Wt.}</u>	
100 mm	4"	100	
90 mm	3-1/2"	100	
75 mm	3"	100	
63 mm	2-1/2"	100	
50 mm	2"	100	
37.5 mm	1-1/2"	100	
25 mm	1"	100	
19 mm	3/4"	100	
12.5 mm	1/2"	100	
9.5 mm	3/8"	100	
4.75 mm	#4	100	
2.36 mm	#10	100	
1.18 mm	#20	78	
0.600 mm	#40	11	
0.300 mm	#80	1	
0.150 mm	#100	1	
0.075 mm	#200	0.5	

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Phone (617) 666-6040

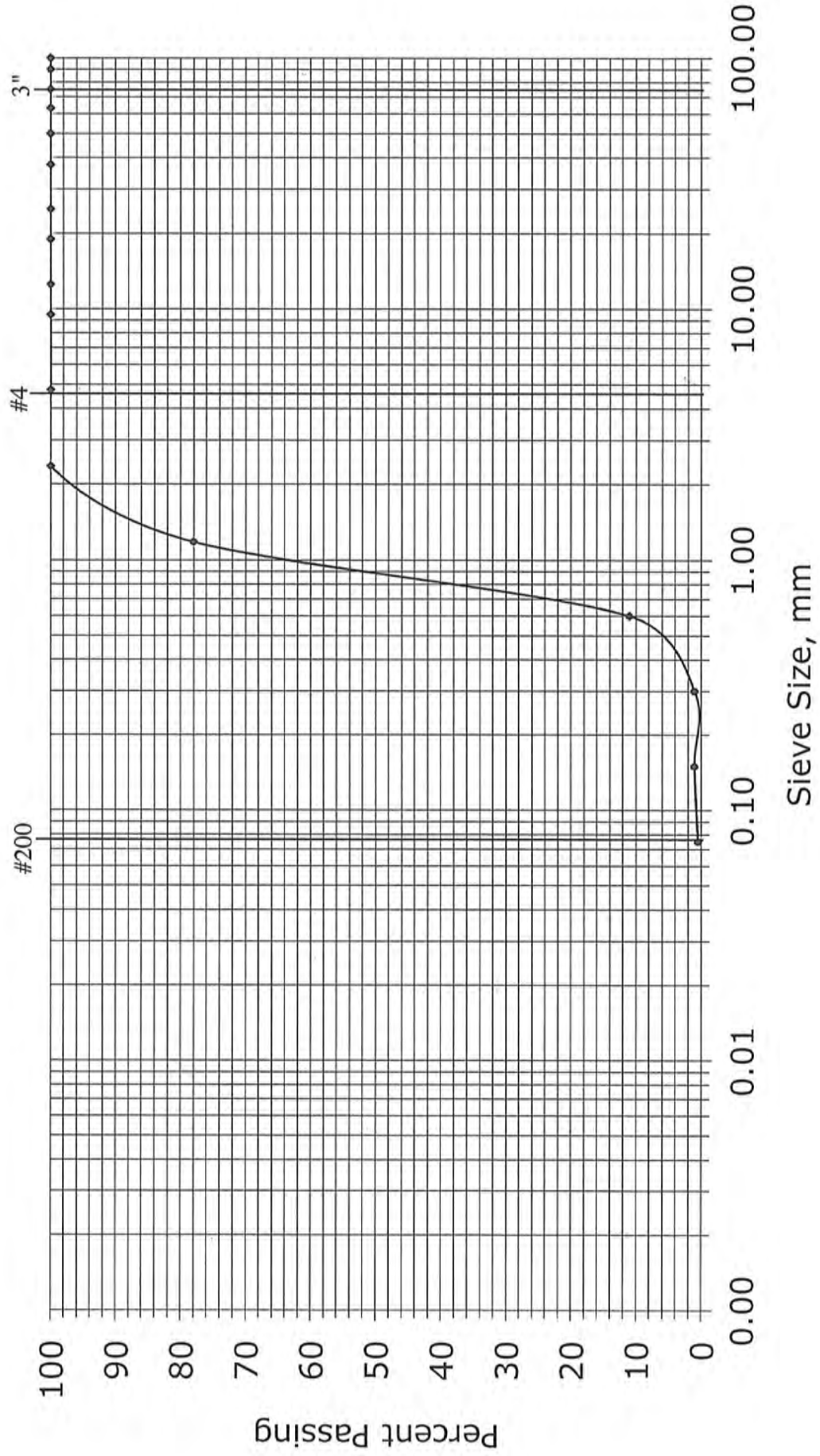
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A Division of P.K. Associates, Inc.

Project:	Polpis Harbor Maint. Dredging
Date Tested:	6/10/14
Lab Ref. No.:	M-24381

Sieve Analysis





Briggs Engineering & Testing

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CLE Engineering
15 Creek Road
Marion, MA 02738
ATTN: Mr. Trevor Doolan

Report Date: 6/12/14

Project: **Polpis Harbor Maint. Dredging**
Briggs #: 25284

Tested: 6/10/14
Received: 6/3/14

1.	<u>Sample No.</u>	<u>Description</u>	<u>Source of Material</u>
	M-24382	Sand	PH-7

2. Sieve Analysis {ASTM C 136, and ASTM C 117}

<u>Sieve Size</u>		<u>Results</u>	<u>Specifications</u>
Standard	Alternate	{% Passing by Wt.}	
100 mm	4"	100	
90 mm	3-1/2"	100	
75 mm	3"	100	
63 mm	2-1/2"	100	
50 mm	2"	100	
37.5 mm	1-1/2"	100	
25 mm	1"	100	
19 mm	3/4"	100	
12.5 mm	1/2"	100	
9.5 mm	3/8"	99	
4.75 mm	#4	98	
2.36 mm	#10	92	
1.18 mm	#20	57	
0.600 mm	#40	18	
0.300 mm	#80	1	
0.150 mm	#100	1	
0.075 mm	#200	0.9	

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Director of Testing Services
Construction Technology Division

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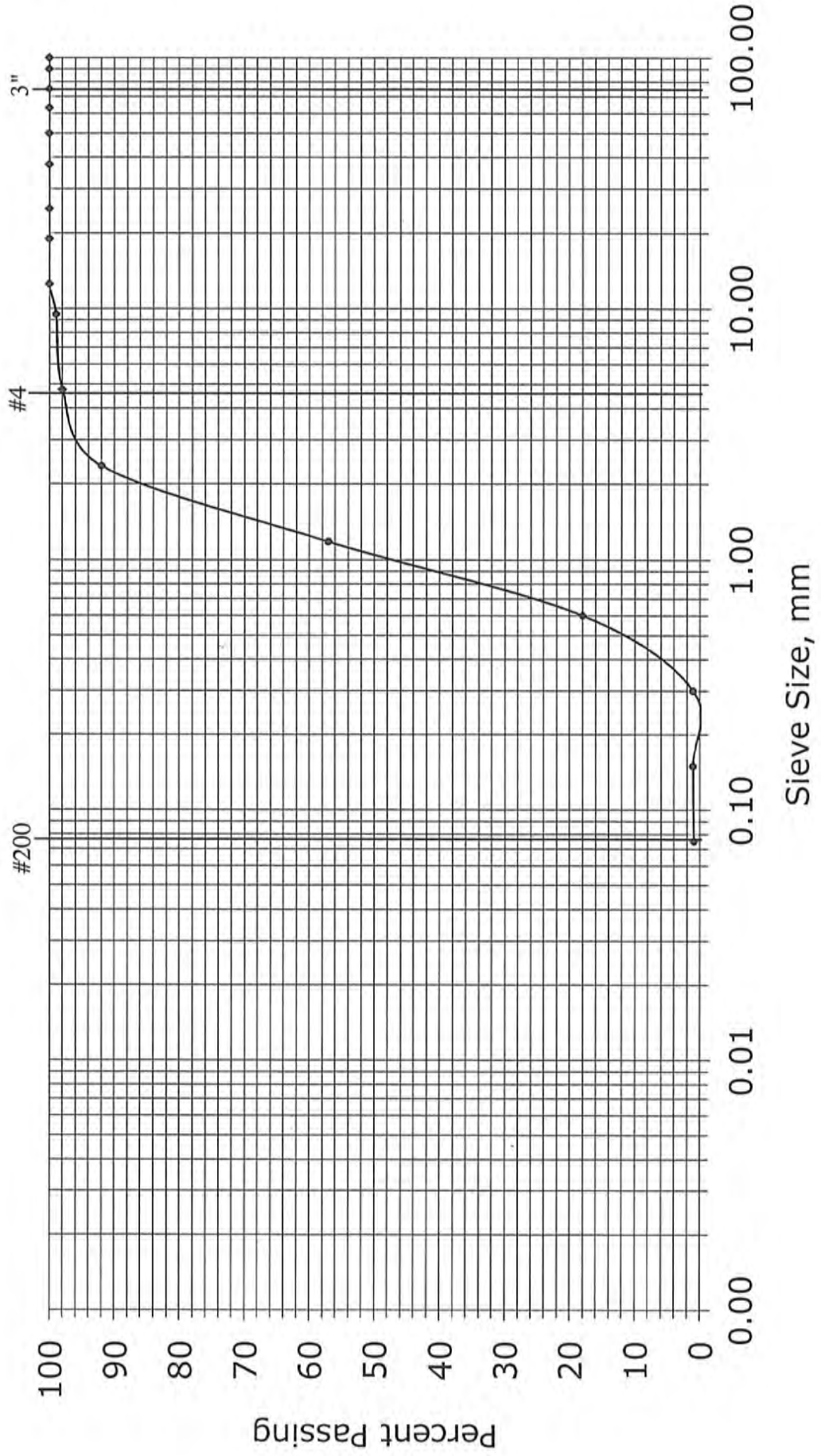
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Briggs Engineering & Testing
A Division of PK Associates, Inc.

Project:	Polpis Harbor Maint. Dredging
Date Tested:	6/10/14
Lab Ref. No.:	M-24382

Sieve Analysis





Briggs Engineering & Testing

A DIVISION OF PK ASSOCIATES, INC.

CLE Engineering
15 Creek Road
Marion, MA 02738
ATTN: Mr. Trevor Doolan

Report Date: 6/12/14

Project: **Polpis Harbor Maint. Dredging**
Briggs #: 25284

Tested: 6/10/14
Received: 6/3/14

1.	<u>Sample No.</u>	<u>Description</u>	<u>Source of Material</u>
	M-24383	Sand	PH-8

2. Sieve Analysis {ASTM C 136, and ASTM C 117}

<u>Sieve Size</u>		<u>Results</u>	<u>Specifications</u>
<u>Standard</u>	<u>Alternate</u>	<u>{ % Passing by Wt. }</u>	
100 mm	4"	100	
90 mm	3-1/2"	100	
75 mm	3"	100	
63 mm	2-1/2"	100	
50 mm	2"	100	
37.5 mm	1-1/2"	100	
25 mm	1"	100	
19 mm	3/4"	100	
12.5 mm	1/2"	100	
9.5 mm	3/8"	100	
4.75 mm	#4	99	
2.36 mm	#10	98	
1.18 mm	#20	66	
0.600 mm	#40	10	
0.300 mm	#80	1	
0.150 mm	#100	1	
0.075 mm	#200	0.7	

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Construction Technology Division

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Phone (617) 666-6040

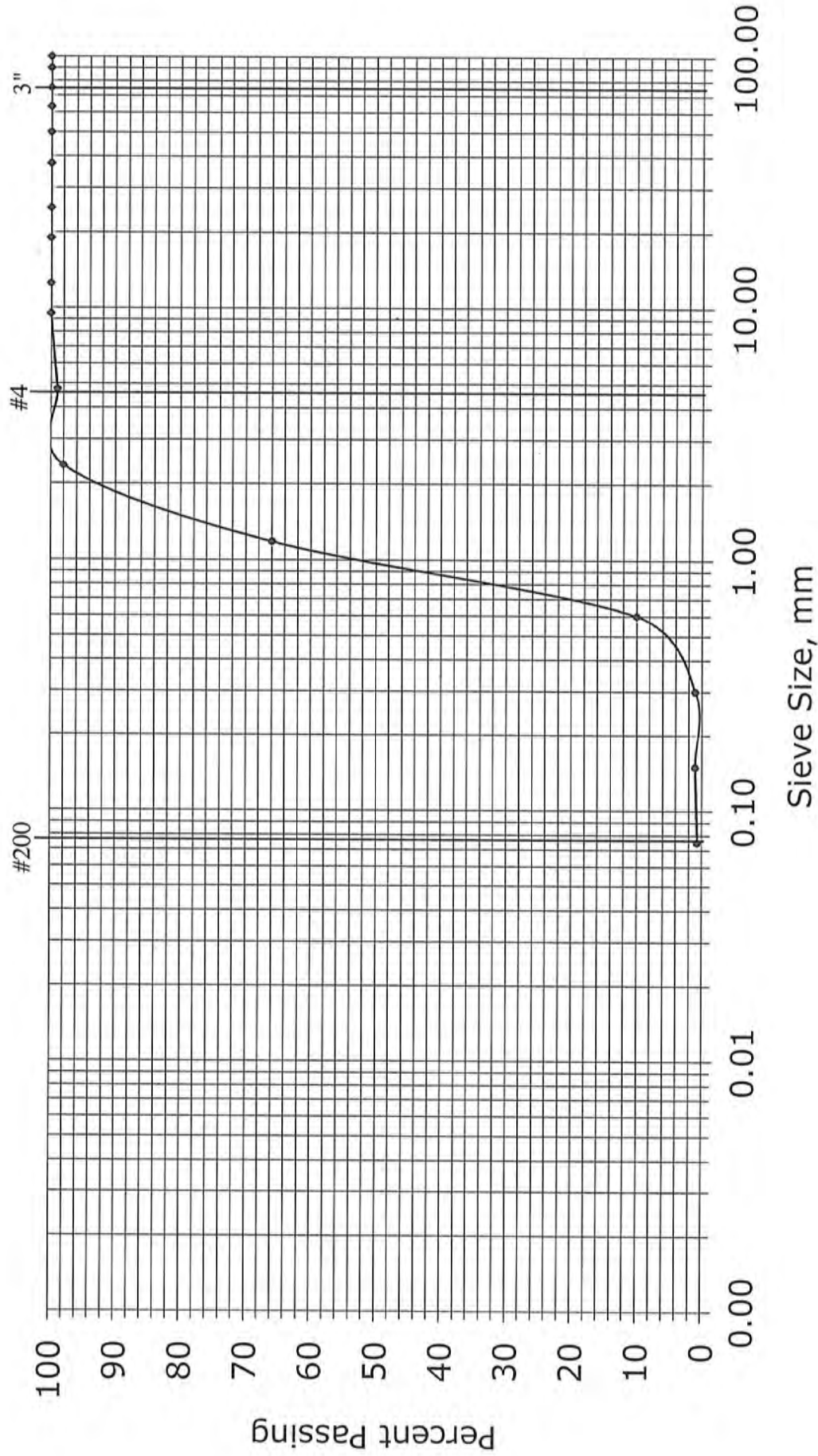
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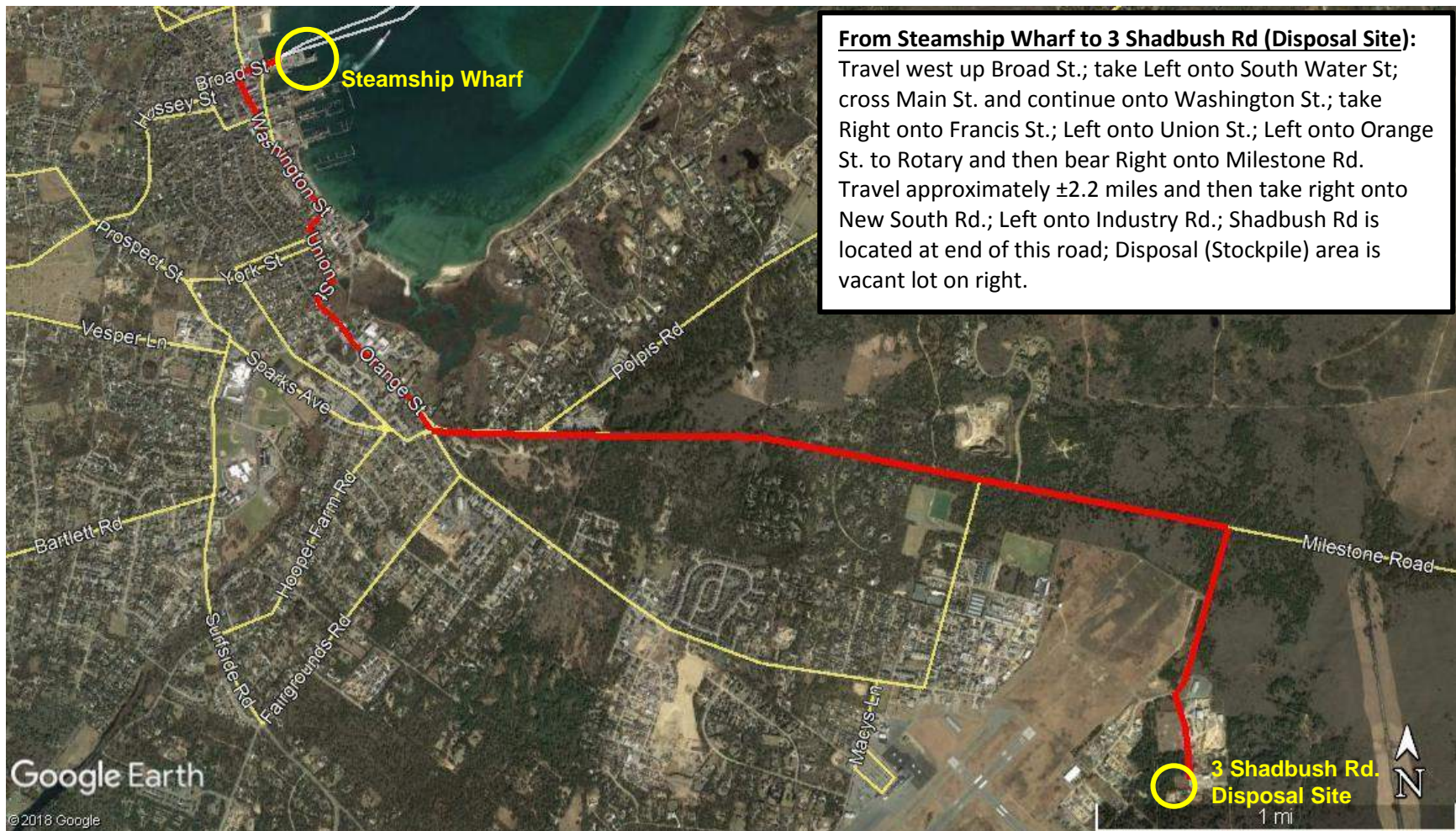
Project:	Polpis Harbor Maint. Dredging
Date Tested:	6/10/14
Lab Ref. No.:	M-24383

Sieve Analysis



ATTACHMENT D

TRUCKING ROUTE



ATTACHMENT D
TRUCKING ROUTE
POLPIS HARBOR MAINTENANCE DREDGING PROJECT
TOWN OF NANTUCKET, MA

ATTACHMENT E

**CONTRACT DRAWINGS
DATE ISSUED: OCTOBER 9, 2018**

**COVER PAGE AND SHEETS 1-2 ENTITLED:
POLPIS HARBOR MAINTENANCE DREDGING
NANTUCKET, MA**

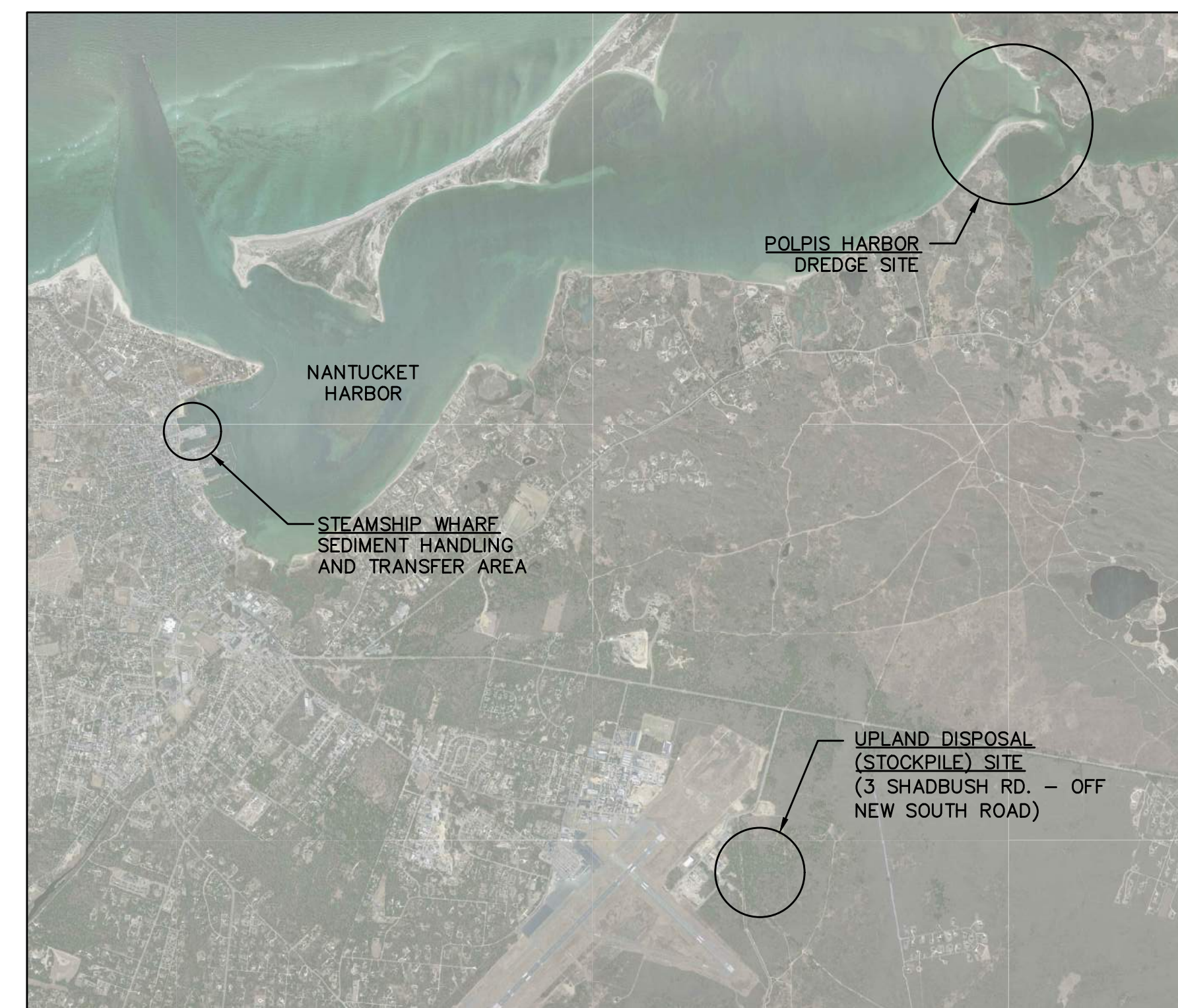
**PREPARED BY FOTH-CLE ENGINEERING
(STAMPED BY: SCOTT R. SKUNCIK, P.E.)**



TOWN OF NANTUCKET, MASSACHUSETTS

POLPIS HARBOR MAINTENANCE DREDGING

OCTOBER 9, 2018

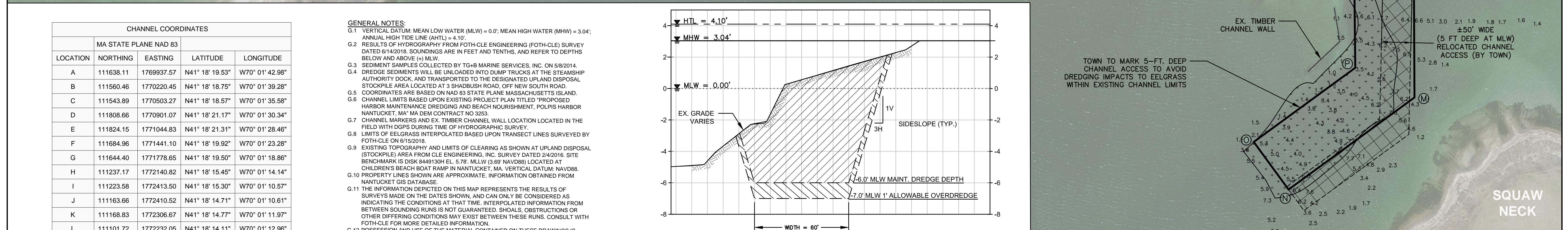


<u>SHEET</u>	<u>TITLE</u>
C	COVER
1	DREDGE PLAN AND TYPICAL SECTION
2	SEDIMENT HANDLING/TRANSFER AND UPLAND DISPOSAL (STOCKPILING) SITES



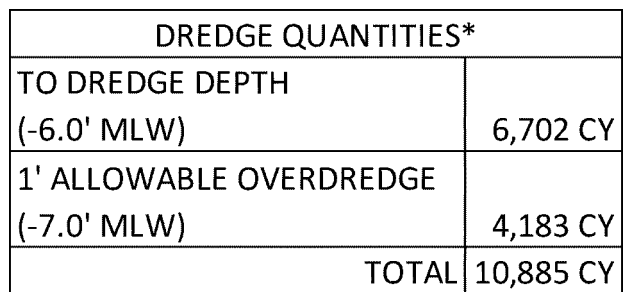
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MARION, MA 02738
TEL. NO. (508) 748 0937
CLEENGINEERING.COM
FOTH.COM





GENERAL NOTES:

- G.1. VERTICAL DATUM: MEAN LOW WATER (MLW) = 0.0'; MEAN HIGH WATER (MHW) = 3.04'; MEAN HIGH LOW WATER (MHL) = 4.10'.
- G.2. RESULTS OF HYDROGRAPHIC SURVEY FROM FOT+C-E ENGINEERING (FOT+C-LE) SURVEY DATED 6/14/2018. SOUNDINGS ARE IN FEET AND TENTHS, AND REFER TO DEPTHS BELOW AND ABOVE (+) MLLW.
- G.3. SEDIMENT SAMPLES COLLECTED BY T+G+B MARINE SERVICES, INC. ON 5/8/2014.
- G.4. DREDGE DEPOSITS WILL BE UNLOADED INTO DUMP TRUCKS AT THE STEAMSHIP AUTHORITY DOCK AND TRANSPORTED TO THE DESIGNATED UPLAND DISPOSAL STOCKPILE AREA LOCATED AT 3 SHADBUSH ROAD, OFF NEW SOUTH ROAD.
- G.5. COORDINATES ARE BASED ON NAD 83 STATE PLANN MASSACHUSETTS ISLAND.
- G.6. CHANNEL LIMITS BASED UPON EXISTING PROJECT PLAN TITLE "PROPOSED MAINTENANCE AND IMPROVEMENTS TO THE SOUTH NOURISHMENT, POLIPS HARBOR NANTUCKET, MA" MA DEM CONTRACT NO 3251.
- G.7. CHANNEL MARKERS AND EX. TIMBER CHANNEL WALL LOCATION LOCATED IN THE FIELD WITH DGPS DURING TIME OF HYDROGRAPHIC SURVEY.
- G.8. LIMITS OF ELLRGRASS INTERPOLATED BASED UPON TRANSECT LINES SURVEYED BY FOT+C-HA 6/15/2018.
- G.9. EXISTING TOPOGRAPHY AND LIMITS OF CLEARING AS SHOWN AT UPLAND DISPOSAL (STOCKPILE) AREA FROM C-E ENGINEERING, INC. SURVEY DATED 2/4/2016. SITE BENCHMARK IS BECH 8449130M EL. 5.78' MLLW (3.69' NAVD88) LOCATED AT CHANNELS DECK BOARD RAMP IN NANTUCKET, MA. VERTICAL DATUM: NAVD88.
- G.10. PRINTED LINES SHOWN ARE APPROXIMATE. INFORMATION OBTAINED FROM NANTUCKET GIS DATABASE.
- G.11. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES SHOWN, AND CAN ONLY BE CONSIDERED AS INDICATING THE CONDITIONS AT THAT TIME. INTERPOLATED INFORMATION FROM BETWEEN SOUNDING RUNS OR BETWEEN SHOALS, OBSTRUCTIONS OR OTHER DIFFERING CONDITIONS MAY EXIST BETWEEN THESE RUNS. CONSULT WITH FOT+C-LE FOR MORE DETAILED INFORMATION.
- G.12. PROTECTION AND USE OF THE MATERIAL CONTAINED IN THESE DRAWINGS IS GRANTED ONLY IN CONNECTION WITH ITS USE AS IT RELATES TO THE TITLED PROJECT. ANY OTHER REUSE OR REPRODUCTION OF THE INFORMATION CONTAINED HEREIN IS EXPRESSLY PROHIBITED WITHOUT THE WRITTEN CONSENT OF FOT+C-E ENGINEERING.



GRAPHIC SCALE

0 15 30 60

(IN FEET)

1 INCH = 30 FEET

GRAPHIC SCALE

0 1 3 5

(IN FEET)

1 INCH = 3 FEET



LEGEND:

MLW = EL. 0.0'

MHW = EL. +3.04'

AHTL = EL. +4.10'

PROPOSED MAINTENANCE DREDGING TO EL. -6.0' MLW

EELGRASS (SURVEY DATE 6/15/2018)

PROP. AREA OF RE-ALIGNED CHANNEL (NO DREDGING PROPOSED)

CHANNEL LIMIT/BOT. OF SLOPE

PH# SEDIMENT SAMPLE LOCATION (5/8/2014)



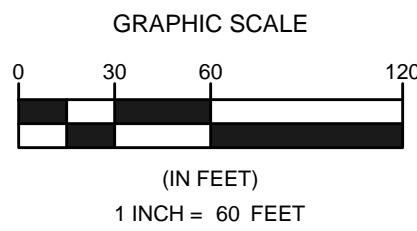
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cleengineering
15 Creek Road | Marion, Massachusetts 02738
t: 508.748.0937 | www.cleengineering.com

SCALE:	AS NOTED	CHECKED	DATE	9-25-2018	DRAWING No.
DRAWN BY:	GK	BY:			COMP CODE 12118.100
REVISION No.	DATE	COMMENT			

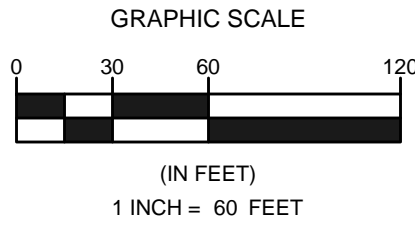


NANTUCKET HARBOR

SITE PLAN
SEDIMENT HANDLING AND TRANSFER AREA – STEAMSHIP WHARF
(SEE CONSTRUCTION NOTE C.5)



SITE PLAN
UPLAND DISPOSAL STOCKPILE AREA
VACANT LOT AT 3 SHADBUSH ROAD OFF NEW SOUTH ROAD



- CONSTRUCTION NOTES:
- C.1 DREDGING SHALL BE PERFORMED USING MECHANICAL METHODS USING A CLOSED, ENVIRONMENTAL BUCKET. ALL SEDIMENTS SHALL BE TRANSPORTED VIA TUG TO THE STEAMSHIP WHARF IN NANTUCKET HARBOR FOR OFF-LOADING AND THEN TRUCKED TO THE DESIGNATED UPLAND DISPOSAL (STOCKPILE) SITE WHICH IS A LOT LOCATED AT 3 SHADBUSH ROAD (OFF OF NEW SOUTH ROAD).
- C.2 THE CONTRACTOR SHALL AVOID ANY IMPACTS TO EXISTING EELGRASS BEDS. NO SPIDDING OR GROUNDING OUT OF EQUIPMENT SHALL OCCUR WITHIN ANY AREAS MAPPED AS CONTAINING EELGRASS. THE CONTRACTOR SHALL INSTALL TEMPORARY BUOYS AS REQUIRED TO SUFFICIENTLY MARK EELGRASS WITHIN 500 FEET OF THE CONSTRUCTION FOOTPRINT PRIOR TO THE START OF WORK.
- C.3 72 HOURS BEFORE ANY DIGGING, THE CONTRACTOR SHALL CALL 1-888-DIG-SAFE PER STATE LAW CHAPTER 502, SEC. 40 (1980). UTILITIES SHOWN ON PLANS MAY NOT BE WHOLLY ACCURATE AND THERE ARE LIKELY UTILITIES NOT SHOWN HEREON.
- C.4 ALL WORK PERFORMED SHALL BE IN ACCORDANCE WITH CONTRACT DRAWINGS, SPECIFICATIONS AND ENVIRONMENTAL PERMITS ISSUED FOR THIS PROJECT.
- C.5 THE CONTRACTOR WILL BE RESPONSIBLE FOR COORDINATING WITH THE STEAMSHIP AUTHORITY TO DETERMINE ACTUAL TIE-UP LOCATION(S) AND TIMES AVAILABLE FOR THE OFF-LOADING OF DREDGE SEDIMENTS AT THE STEAMSHIP WHARF. OFF-LOADING OPERATIONS WILL BE LIMITED TO THE HOURS OF 7:00 AM AND 10:00 PM AND MUST ACCOMMODATE DAILY OPERATIONS OF THE STEAMSHIP AUTHORITY.
- C.6 THE CONTRACTOR SHALL INSTALL AND UTILIZE APPROPRIATE SEDIMENT CONTROL MEASURES TO PREVENT THE LOSS OF DREDGE MATERIAL WHEN TRANSFERRING DREDGE SEDIMENTS FROM WATER TO LAND AT STEAMSHIP WHARF.
- C.7 ALL DREDGE SEDIMENTS SHALL BE TRANSPORTED BY THE CONTRACTOR FROM STEAMSHIP WHARF TO THE UPLAND DISPOSAL (STOCKPILE) AREA IN SEALED TRUCKS IN ORDER TO PREVENT ANY LOSS OF MATERIAL/LEAKAGE DURING TRUCKING OPERATIONS. ALL WORK AREAS AND HAULING ROUTES UTILIZED BY THE CONTRACTOR AND ASSOCIATED WITH THE TRANSFER SEDIMENTS FROM WATER TO LAND, TRANSPORTATION AND STOCKPILING OF SEDIMENTS SHALL BE KEPT CLEAN/FREE OF SEDIMENTS AND SWEEP/CLEANED DAILY (OR AS REQUIRED). ALL TRUCKS TIRES SHALL BE RINSED CLEAN OF DREDGE SEDIMENT AS NECESSARY AND AT THE END OF EACH DAY.



PROJECT: POLPIS HARBOR MAINTENANCE DREDGING

CLIENT: TOWN OF NANTUCKET
16 BROAD STREET, NANTUCKET, MA 02554

SEDIMENT
HANDLING/TRANSFER
AND UPLAND
DISPOSAL
(STOCKPILING) SITES



SHEET 2 OF 2

SCALE:	AS NOTED	CHECKED	DATE	8-25-2018	DRAWING No.
DRAWN BY:	GK	BY:			COMP CODE 12118.100
REVISION No.	DATE	COMMENT			

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